

FINAL REPORT

PROJECT TITLE:

**Supporting the policy and VET teachers practice
related to the usage, design, development and
upgrade of high-quality instructional material
(including online publishing)**

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Summary

The Project: *Supporting the policy and VET teachers practice related to the usage, design, development and upgrade of high-quality instructional material (including online publishing¹)* was developed as a Demonstration project in the Republic of Serbia in the frame of the ETF Strategic Project on VET provision and Quality - *CPD for VET teachers and trainers in the SEET region project*). Within this framework ETF supported during 2016 the demonstration projects in the South East Europe and Turkey region through funds and expertise. The Ministry of Education, Science and Technological Development of Republic of Serbia (MESTD) have formally recommended the RIMSO project.

During the life of the project, as a final result, two groups of VET teachers were trained, 17 teachers project teams were organized and 10 quality instructional materials were developed. At the end, the relevant recommendations for policy maker related to this issue were formulated.

Background

Instructional materials (IM) and textbooks are one of the main pillars of the teaching and learning process. They facilitate, shape and support teaching and learning process, and thus, the fulfillment of the educational aims and objectives. In the Republic of Serbia, due to the lack of other resources and recurrently lack of textbooks, IM often represent the main teaching aid. Since predominantly used by teachers and learners for knowledge acquisition and skills development the deficiency of instructional materials is a serious obstacle for quality teaching.

According to the notion of MESTD, there is a severe lack of accessible, quality and relevant instructional materials. The estimation is that VET schools lack textbooks for 900 subjects. There are several causes of this situation: 1) the modern economy needs flexible and dynamic adjustment of VET curricula and development of new quality instructional materials; 2) publishers in Serbia are not interested (or stimulated) to develop and publish small edition of textbooks such as VET instructional materials; 3) VET teachers in Serbia lack the resources and/or needed skills for developing those materials themselves. The outcome of these situational factors is the absence of instructional materials in many VET programmes, sectors, and subjects (especially recently accredited programmes). In other cases, VET teachers use instructional materials that have not been updated since the end of '90. In both cases, the end result is a serious impoverishment of the teaching and learning process.

The new Law on textbooks (Official Gazette No. 68/2015) and the Rulebook on textbook standards and its manual have been adopted but the full implementation has not yet begun. The publishing companies and teachers are in the preparatory phase for implementing the introduced changes. At the same time, relevant stakeholders share the opinions that changes in educational legislation

¹ RIMSO is project's acronym in Serbian (Razvoj instruktivnih materijala u stručnom obrazovanju)

related to textbooks have not posted stimulating ambiance for delivering new quality textbooks and IM, but left unsolved numerous old problems and raise some new.

Nevertheless, the article 2 of the Law on Textbooks introduces for the first time electronic additions (EA) to the textbook. As the Law prescribes, the textbooks and textbook sets should have electronic additions that are meant to help students in their independent learning, expanding knowledge and skills, and supporting creative work. The content, scope, and functions of EA can be very different and there is no obligation for EA to correspond exactly to textbooks content. The potential for interactivity is a necessary element of EA and should be used in order to enhance effective learning. Electronic additions should also be approved and its quality assessed in line with the Standards. The Standards on EA are described in the *Rulebook on quality standards and guidelines on textbooks and its use* ("Off. Gazette of RS", no. 42/2016). Electronic additions are particularly expected to be part of the textbooks for VET schools and for those subjects that need a frequent update of the instructional materials.

On the other hand, the requirement for professional development of teacher is not well (or enough) supported by the systems. Development of competencies related to designing IM is a typical example of that. There is an expectation that teachers can choose, evaluate or design quality of IM but, at the same time, they were not given the opportunity to develop those competencies, neither through initial education nor through in-service training.

Furthermore, teaching and learning are largely perceived as individualistic teacher-class activities rather than as a collaborative school-based activity. On the other hand, there are more and more evidence that education change could be made if we succeed in making the teachers to "open doors of the classroom" and if schools become 'learning communities' for both students and teachers. Moreover, there is evidence that institutions and VET schools remain unduly disconnected from each other and from the increasingly multi faceted environments in which they operate.

So, there is a need for development and testing the new CPD policy approach in the area of building teachers capacity for dealing with IM. The new approach relies on teacher's cooperation on IM development in school settings. This "learning by doing" approach includes continued support for teachers given by experts (both in teaching/learning and in ICT). Expert's support consists of training, but also monitoring, evaluating, negotiating, advising, resource providing, etc. Support is continuous, flexible and appropriate for each teacher. Thus, teacher's learning needs can be met more efficiently.

Among other issues, the new policy should discuss the potentials of the use of ICT and possibility for a teacher to make appropriate career advancement on the basis of online IM development. From teacher's perspective, they especially need support in developing pedagogical skills and application of ICT in class (European Commission/EACEA/Eurydice, 2015).

Thus, experts from Education Forum and Moodle Network of Serbia has come together on a project *Supporting the policy and VET teachers practice related to the usage, design, development and upgrade of high-quality instructional material (including online publishing)* to combine its expert knowledge in different fields: education policy, psychology of learning and education technology in order to contribute to the VET education sector reform in Serbia.

The overall objective of the RIMSO project was to foster policy and practice of CPD for VET teachers related to the quality IM. The key issues that were addressed – more or less directly, were 1) the need for development and testing of new policy approach in the area of developing VET instructional material; and 2) the need for a new organizational model for teacher's capacity building in order to implement that policy, with a special focus on supporting them in development competencies required for learner-centred approach in teaching and for application of ICT in class. This project promotes *school-based in-service TET* and schools as 'learning communities for the students and for the teachers as well.

Specific objectives of this project were:

- To support policy development in VET related to the quality instructional material by developing Recommendations for Instructional Material Development for VET teachers (including online publishing).
- To foster the capacity of VET teachers for usage, designing, development, and upgrading of high-quality instructional material (including online publishing) by designing training modules for school-based or sector-based teams of teacher and building mechanisms for teachers' lifelong learning.
- To develop a partnership between organizations and individuals contributing to the development and upgrading of high-quality instructional material (including online publishing) in VET education.

Project Realization

In general, the project had three main pillars/phases:

1. The first phase consisted of the development and realization of teacher training programs. The programs for building teacher's capacity for constructing and using quality instructive material were focused on the development of two groups of competencies: competencies **needed** for the learner-centered approach in teaching and competencies necessary for education technology application. This phase ended in June 2016.
2. In the second phase, 17 teacher's project teams were formed on the base of common expertise and conception of planned instruction material for chosen VET subjects. The project teams developed agenda for work on instruction material. The project teams consisted of two to six members, e.g. an optimal number of group members for effective work. Through this phase, active support from project's team experts in active learning and educational technology were available for teachers. The second phase ended in the December 2016.
3. The third phase was focused on the development of the Recommendations for Instructional Material Development for VET teachers (including online publishing).

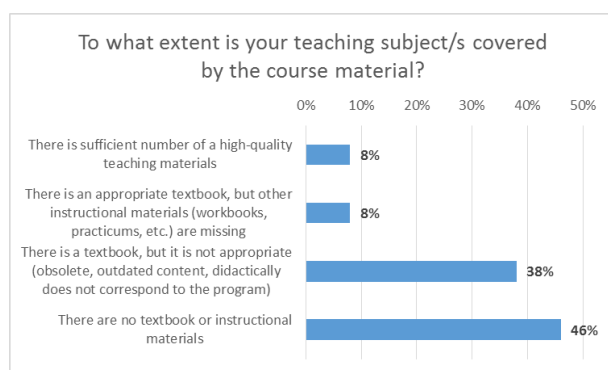
The realization of the first phase

As RIMSO was a demonstration project, e.g. pilot project, it was important to find participants who were sincerely motivated to take a part in the project. We were oriented to find teachers who were reflective and motivated to modernize their teaching practice. We were looking for teachers working in one school or several schools from one local area. This territorial proximity was important because of planned intensive cooperation in the second phase. Selections of schools and teachers were based on various recommendations from colleagues from MESTD, representatives of various VET sectors associations (e.g. electro-engineering sector), etc. We collected recommendations for schools, teachers, and school principals².

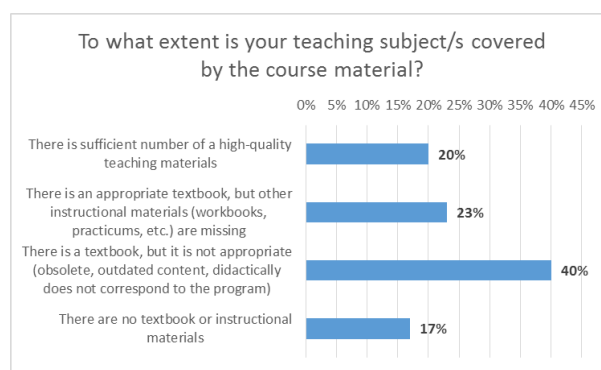
After the selection of schools, the selection of teachers was done. We invited teachers to participate in the project on a voluntary basis and sent them the invitation letter with relevant information about the Project. The teachers were informed about the project's aim and the expectations regarding their involvement in the project. For the purpose of recruitment of motivated teachers, we created the *Project Community*. Project community referred to the community of teachers - professionals who are dealing with professional problems, who share knowledge and responsibility, who are reflective and oriented to the improvement of the educational outcome of VET students. Members of project community can use this project to contribute to educational politics related to designing instructional material in VET schools on a wider scale.

Teachers were also invited to fill in the online questionnaire. The invitation letter, the questionnaire and the results of the survey related to the advancement of teacher's practice in usage and development of instructional materials (including on-line publishing) from two schools situated in Nis and Pancevo can be found following this link: <http://bit.ly/2iUI5di>. This survey was important as a source of information about teachers, their attitude, opinions and implicit beliefs about the teaching/learning processes and the role of the textbooks in it. Here are answers to two questions in the survey:

To what extent is your teaching subject/s covered by the course material?



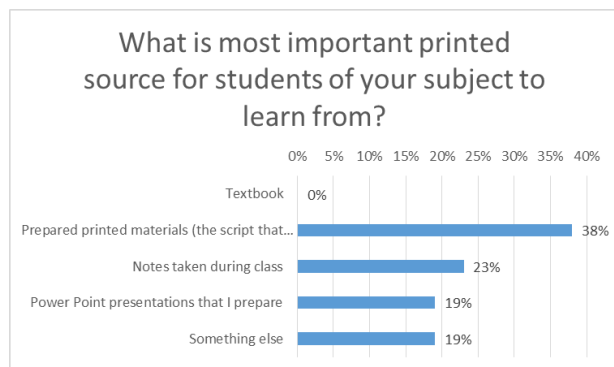
Pre-training survey, Nis



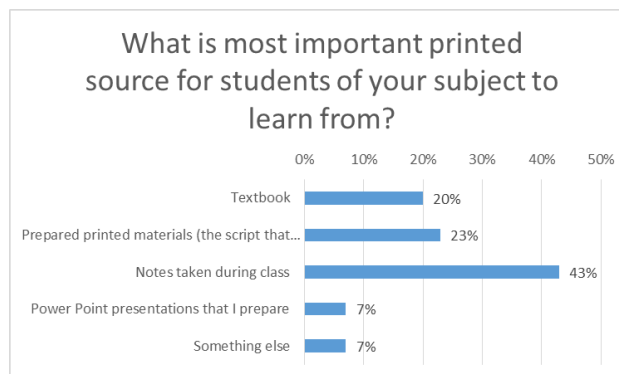
Pre-training survey, Pancevo

² Motivated principals and effective school leadership are the most influential factors of educational change and human capacity building in school (Fullan, M. (2007). *The NEW Meaning of Educational Change* (3rd edition). New York and London: Teachers College Press, Columbia University.)

What is the most important printed source for students of your subject to learn from?



Pre-training survey, Nis



Pre-training survey, Pancevo

The interesting result from the survey was that none of 30 participants from Pancevo group is familiar with the options of Moodle platform for the teaching process. At the same time (62%) participants from Nis group include Moodle in teaching the process. So, it was necessary to develop two similar, but not the same training programmes.

Based on the gathered information we developed training modules to meet learning need of teachers as best as it is possible. As a result of the first phase, we developed two training modules, one that is focused on pedagogical issues (based on contemporary theories of teaching-learning processes and role of IM in it) and other that is focused on education technology, precisely on the basic and advanced application of Moodle Learning Management System and other ICT tools. (See Appendix 1 for Training agenda for Module 1).

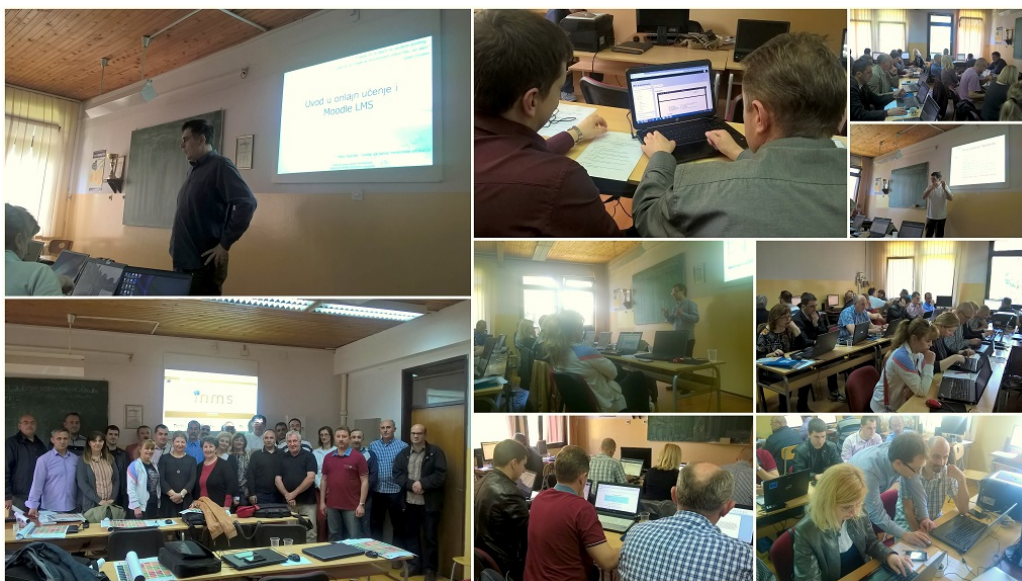
Timeline of the first phase activities

Two-day seminar (Module 1) named: *Contemporary teaching, learning, and instructional materials* was held in Electrical Engineering Vocational School “Nikola Tesla” in Nis, from 22 to 23 April 2016. It gathered 30 teachers of electrical engineering and mechanical engineering schools who attended the seminar from several towns: Nis, Leskovac, Prokuplje, Vranje, Pirot. Agenda and the evaluation from the seminar can be found at the following link <http://bit.ly/2ivt7t0>.

The whole seminar was monitor by a representative of MESTD (Mrs. Danijela Šćepanović). She discussed relevant issues with both trainers and participants, and gave a report at the end.

The second training with this group of teachers was within Module 2: *On-line instructional materials development* - the same group of 30 teachers from the first training participated. It was organized in Electrical Engineering Vocational School “Mija Stanimirović” in Nis, and it was also organized as a two-day seminar - from 6th to 7th May 2016. The focus of the seminar was supporting the teachers in updating the necessary knowledge and skills for the proper application of ICT in teaching, in order to meet the educational needs of students in the digital age. The seminar covered the topics such as online instructional materials (OER, LMS, web 2.0), the basics of e-learning, and instructional design principles in the online environment, open educational resources, electronic textbooks and gaining skills to use the main functionalities of Moodle Learning

Management System. Additional information and materials for this Module can be found at the following link: <http://bit.ly/2iCa4NP>.



The second training, Module 2, Nis, 6-7, May, 2016

The third training (Module 1 for the second group of teachers) took place in Pancevo, on June 4th and 5th. The Module 1: “*Contemporary teaching, learning and instructional materials*” was adapted to the learning needs of this new group of 30 participants, teachers coming from different fields, such as chemistry, agriculture, food production and processing, geodesy.

This group of teachers shared the majority of the problems related to the instructional material as teachers of electro engineering sector from Nis. Teachers were very active in solving different tasks during the seminar, discussions were fruitful and evaluations are very positive.



The third training, Module 1, Pancevo, 4-5, June, 2016

The fourth training, Module 2 (*Online instructional materials development*) for the second group of teachers) was held in Pancevo, on June 18th and 19th 2016.

Described trainings lasted 8 days in total (2 groups of teachers x 2 training modules x 2 days). In the last sequence of the second round of trainings, teachers were given the assignment to form small working groups. Teachers discussed similarities of content they teach, type of problems with the instructional materials, urgent needs for support students understanding and motivation for learning, etc. This discussion was used as a guide for organizing groups of teacher that would work on IM in the next phase of the project. More concretely, 18 small groups were formed (See Appendix 2. for the list of instructive material projects).

The realization of the second phase

The second phase consisted of drafting the teaching materials by groups of VET teachers participated in the training. During the second phase (from June to December 2016) teachers were encouraged to meet in order to present ideas and results to their colleagues in the project community, where they were able to discuss and get feedback for their improvement.

Teachers were also encouraged to ask for help from experts from Education forum or Serbian Moodle network; either they needed help in pedagogical matters or in educational technology tips. These encouragements were more welcomed by teachers from Pancevo VET School. Teachers from this school (no matter what sector or other specifics) were more willing to ask for support, process evaluations, suggestions, etc.

Experts from Education Forum and Serbian Moodle network visited Pancevo VET school twice (in September 2016). During these monitoring visits, experts discussed with teachers main obstacles and advantages in process of designing IM, provided various kinds of support needed for further work, and possible ways of resolving problems. The groups were given constructive feedback for IM draft versions, etc.

At the same time, consultations were held virtually through e- mail and chats on Moodle platform with both Nis and Pancevo groups.

Nevertheless, teachers were not motivated enough to use expert assistance. Only about 5% of teachers used the opportunity to exchange materials within Project community with teachers from other groups and with a project team besides official visits from the project team. This situation was more evident in Nis school than in Pancevo school. Teachers from Nis school were reluctant to make the working groups after training. One teacher refused to participate in any group and remained solo during the whole time of the project.

We consider this unwillingness for cooperation as a sign of one of the major problem in CPD in Serbia, e.g. teachers tend to work alone and do not have a habit to work with others on resolving everyday school topics, especially those related to teaching. Even if they teach similar subjects they usually do not exchange materials, lesson plans, etc.

In Pancevo school, teachers were more willing to cooperate with each other. For example, general subjects teachers (as mathematics or English language), did not form a group for general subject, but they took part in interdisciplinary teams dealing with interdisciplinary topics (mathematics in

engineering, or English language in geodesy, etc). Even we found this difference between two project groups interesting and considered that it could be useful to explore the attitudes that pin this demonstrated behavior, it was out of the scope of our project.

Lastly, two schools had different final results in the project: teachers from Pancevo school developed more products (6 in printed and on-line version) and teachers from Nis developed 4 on line instructive material. We believe that this difference was partly due to the different leadership approach school's principals had. The principal of Pancevo school was very involved in the project, she took a role of the participant during training, and a role of a member of one project group. She encouraged and motivated colleges to work on instructive material. In Nis school, the principal gave only logistical support during training and nothing else. The lack of involvement and disinterest of the principal opened the space for the weak project engagement of teachers (they hardly answered on emails, were late in filing questionnaire, in sending materials, etc.). Until the end of the project (December 2016.), a significant number of groups from Nis school did not finish their products. This communication and responsibility issues with teachers in Nis schools was the weakest point of the project.

It is important to note another insight regarding teachers' readiness for implementing innovations: they demonstrated certain resistance to change, or resistance to implementing learned novelties in teaching practice. Teachers usually consider innovation as an "out of school" activity: they are willing to participate in training seminars (with more or less enthusiasm), they even consider training as very useful to their practice (15 teachers from Pancevo said that trainings in this project were the most interesting and the most useful of all training they've ever got), but, when they got back to school they hesitate to implement the knowledge and skills they have learned.

On the other hand, we should respect the notion that teacher's extra activities are usually not recognized and rewarded, they live in the state of prolonged poverty and decrease of social respect, so it is very hard to maintain motivation for the extra activity. Teachers in Serbia have little or no autonomy in the teaching and they usually feel only as an implementer or executor of direction from the Ministry. This was the issue in this project also. We expected that their authentic need for new instructional material would be sufficient for activating and maintaining motivation, but it seems they need more support. Based on this insight, and together with the problems we had with the group of teachers from Nis, we can open a question of the role that organizational culture has on implementing changes in a school system. Relevant values of the targeted organization, demonstrated also through their leader, should be considered as one of the important aspects during the selection phase of future innovation projects.

The realization of the third phase

The third phase included the development of the Recommendations for building competencies of VET teachers related to quality IM Development (including online publishing). (See Appendix 4 for List of recommendations).

In this phase, dissemination of idea of RIMSO project was realized on preceding discussion during Moodle Moot Conference. The whole segment of the conference was devoted to the project

“Instructional Material Development – including online publishing (RIMSO)” (see Appendix 5 for short report from Moodle Moot Conference).

Key results of the Project

1. 60 teachers from Nis and Pancevo municipalities were educated in 2 complementary seminars: one was focused on the pedagogical issue and other on basic skills for on-line instructional materials development. Teachers responded positively and judged that trainings were relevant to addressing their own skills needs (one teacher said: “I could never enter again a class with the same attitude towards teaching and learning as before training”). Trainings served also to address deficiencies in teaching and learning resources. Teachers also reported that Moodle tools would be of value to them as pedagogical tools.
2. During the lifetime of the project we managed to organize 17 teacher’s project teams on the base of common expertise and conception of planned instruction material for chosen VET subjects. All of them started to work on developing instructive materials, but only 10 groups finished assignment (see Appendix 2: all of them are posted on Moodle platforms (5 on Serbian Moodle network and 5 on local Moodle test base). Teachers also submitted 4 IM in paper printed version (see Appendix 3). All finished instructive materials were prepared for next school year, so we have no information on students’ reactions.
3. The analysis of product (instructive material) developed during the project can be taken as evidence of improved teachers’ pedagogical competencies. The instructive materials (IM) are not only “content-oriented” as a list of new information, but reflect “learning centered approach” in teaching with a lot of components designed to support the learning process.
4. The trainings included both formal training and support in implementation. Although teachers hesitated to reach for experts’ help during the development of IM in the amount we expected (only 5% of teachers asked for more help besides 2 official visits of the project team), we still consider this as a potentially effective pattern of CPD. For more results it would be necessary to create mechanisms for raising teachers’ motivation and responsibility, and, on the other hand, improvement of legislation framework for such teachers’ activity. We also raised the question of organizational culture and leadership role as relevant aspects of the faced inertia.
5. Recommendations for Instructional Material Development for VET teachers (including online publishing) were prepared (see Appendix 4).

Appendixes

Appendix 1: Training agenda for Module 1: Instructional material (IM) – General quality criteria in the framework of learner centered teaching

Objectives:

1. The participants will be able to understand nature and the main characteristics of learner centered approach in teaching.
2. The participants will acquire knowledge of quality textbook/instructive material criteria.
3. The participants will be able to apply quality textbook/instructive material criteria.
4. The participant will improve competencies necessary for cooperation and problem-solving in small groups and teams.

AGENDA is available on link

<https://connections.etf.europa.eu/wikis/form/anonymous/api/wiki/33401b6a-3cf0-4238-afd2-3db031c82219/page/0fd62d04-f07e-4d66-aefe-34bab4c349b0/attachment/761fd3c7-de14-40b1-abbb-6d4834dce7e1/media/Training%20Module%201%20-%20objectives%20and%20agenda.pdf>

Appendix 2: The list of participant's instructive material development projects

	Project community/ Project teams	Instructive material / content /project name	Realisation
1.	Violeta Dimić Jasminka Milosavljević	Arhitektura računara	http://www.etstesla.ni.ac.rs/e-ucenje/course/view.php?id=145
2.	Bratislav Ilić	Audacity – instalacija programa i radno okruženje	Realised but with no confirmation
3.	Miladinović Ivana Stevanović Zoran Rastić Oliver	Rutiranje	Realised but with no confirmation
4.	Živković Dragan Petrović Goran	Struktura html dokumenta	No information
5.	Miodrag Vasić Miodrag Božić Dragan Milić	Praktikum iz laboratorijskih vežbi iz web programiranja za III razred profila „Elektrotehničar IT”	Available on Moodle network Serbia
6.	Dragan Milosavljević Aleksandar Krstić Marina Kostić Grada Manojlović	Praktikum za laboratorijske i računarske vežbe iz Električnih instalacija i osvetljenja za III razred elektrotehničke škole (obrazovni profil: elektrotehničar energetike)	Realised but with no confirmation
7.	Zorica Živanović Olivera Radenković Zoran Ignjatović Nenad Stojić Danijela Mladenović	Kombinaciona kola i mreže	Realised but with no confirmation
8.	Brkić Srbojlob Stamenković Dejan	Modeliranje sa analizom elemenata i mehanizama	No information
9.	Danijela Stajić Popović Nataša	Operativni sistemi i aplikativni softver	Available on Moodle network Serbia
10.	Krstić Saša Stamenković Dejan	Održavanje i metraža mehatronskih sistema Laboratorijska vežba – praktikum	http://www.etstesla.ni.ac.rs/e-ucenje/course/enrol.php?id=83 password: teslapro
11.	Stanković Petar Pešić Andreja Ničković Jovan	Mikrokontroleri Laboratorijska vežba – priručnik, praktikum	No information

12.	Članovi tima: Dragana Vučić, Nataša Zečević, Mira Marić, Jovanka Vićentić, Branka Subin, Milka Tirnanić, Jugoslav Bogićević	Aluminijum	Available on Moodle local test base and printed version, Appendix 3
13.	Članovi projekta; Anđelka Đaković, Lana Petković, Aleksandra Ivanović i Danijela Petrić	Fotogrametrija	Available on Moodle local test base And in printed version, Appendix 3
14.	Projektna grupa: Gordana Stojak Jovanović, Jelena Ćurčić, Nataša Kočović, Suba Slavica, Olivera Ignjatov i Vladimir Šarac	Sumporna kiselina	Realized but with no confirmation
15.	Članovi tima: Stankovski Nataša, Petrić Danijela, Krga Branislava	Praktična nastava za tehničara pripreme grafičke proizvodnje	Available on Moodle local test base And in printed version, Appendix 3
16.	Članovi: Ivana Barevački, Vukica Stanojević Momčilović, Nataša Grubanov, Ljiljana Đuretanović, Gordana Dragić Milosavljević, Biljana Živanović	Ishrana ljudi	Available on Moodle local test base And in printed version, Appendix 3
17.	Projektna grupa : Nedeljković Desanka, Vari Biljana, Ničevski Svetlana, Popadić Tamara	Tehnologija stočne hrane	Available on Moodle local test base And in printed version, Appendix 3

Appendix 3: Printed version of 4 IM

Additional zipped folder

Appendix 4: Recommendations for improvement CPD related to building teacher competencies in designing quality instructive materials (including on-line publishing)

Introduction

The recommendations as presented in this document are formulated as a synthesis of data from several sources with giving respect to all specificity of state of affair in Serbian VET education³ and characteristics of the socio-cultural milieu. The Recommendations were based on the:

- Experiences and researchers gathered during the project lifetime;
- Suggestions of teachers in Project community;
- Knowledge based on the dominant paradigm of learner-centered approach to teaching;
- Knowledge of basic principles of learning in an online environment and learning needs of VET teachers.

Recommendations may further serve as a background document for further discussion with relevant stakeholders (VET teachers, policy makers, researchers in education, experts in textbook development, experts in learner-centered teaching, and experts in learning in online environments). Underlining frame of reference is the dominant paradigm of learner centered approach to teaching, basic principles of learning in an online environment and learning needs of VET teachers.

Recommendations

1. Improving institutional responsibilities

- 1.1. Institutional capacities of the units in charge of regulations related to the textbook and instructive materials (IM) development (law and standards for quality assurance) should be strengthened by expert support⁴.
- 1.2. MOE should develop the Rulebook and precise and clear condition for teachers developing IM in the school context. The Rulebook should define all relevant issues: the authorship, financial support, workload of the teacher during developing IM, support for IM quality assurance, availability of a necessary source of information, etc.
- 1.3. MOE should develop mechanisms for exchanging experience among teachers and among schools:
 - *Development of the OER for teachers' exchange on IM* that is free of charge.
 - Development of the *national OER targeting VET e-textbooks and IM* provision should be prepared.

⁴ There is estimation that in Serbia there are 10-15 experts for the textbook and IM issues. Those experts were not consulted by the Institute for Educational Development currently in charge for this regulation during development of the Law and standards for quality assurance of textbook and Instructive materials.

- 1.4. Improving school leadership for supporting teachers. The principal is the most influential factor in motivating teacher to change the practice of teaching, communicating with students, communicating with other colleagues, etc. So, planned recruitment, selection, and CPD of school principal should be in the focus every education reform, including one related to designing, evaluating, choosing and usage of the textbook and instructive material.
- 1.5. The associations of VET teachers organized in sector VET associations (e.g., electro-engineering, agriculture, etc), should be enforced to define strategy related to designing IM and to cooperate with MOE in designing and disseminating quality IM.

2. Improving Regulatory framework: **making clear regulation about provision and quality of instructive materials prepared by teachers**

- 2.1. Standards of textbook quality should be significantly improved
- 2.2. *“Five Pillar” Discussion Panels*, prepared and led by the experts, on selected topics, targeting the implementation of the solution of the current Law on textbooks *should be organized* giving the enough time for experts, representatives of the research community, teachers, representatives of the publishing companies and policy makers to discuss most critical points in the current textbook publishing system and framework.
- 2.3. Question of intellectual ownership in the case of teacher designing instructional material placed on VET platform should be solved

3. Improving Teacher training for selection, evaluation, usage and developing instructive material (including on line publishing)

- 3.1. These trainings should be part of **initial** teacher education and in-service training. A sufficient number of relevant in-service trainings should be given to those VET teachers that are in greater need for textbooks and instructional materials preparation to support their teaching process. Their capacities should be strengthened of in an area of preparation intellectually challenging elements of instructional materials (either during face to face classes or online). In addition to that, expert coaching and monitoring process should be set to assure full/continuous quality instructional material development.
- 3.2. No matter how seminars are efficient, teachers need **continuous and various** support in developing competencies for designing quality IM.

Appendix 5: Dissemination of project's results, experiences, and insights at the 6th Moodle Moot Conference

The 6th Moodle Moot Conference was organized on 15th of October 2016. by the Moodle Network of Serbia from Belgrade, in partnership with the Special Primary and Secondary School "Milan Petrovic" from Novi Sad. The conference took place in the school premises in Novi Sad. There were more than 100 participants at the conference: mainly teachers from primary and secondary schools as well as from higher education, representatives of the Ministry of Education, Science and Technological Development, representatives of publishers and NGO representatives.

The discussion panel was organized within the section III of the 6th Moodle Moot Conference and was prepared by the Education Forum and Serbian Moodle Network. The goal of the discussion was to clarify the recent changes in the regulatory framework regarding instructional material development. This session was focused on gathering opinions of various stakeholders on the usage, designing, development, and upgrading of materials including online tools and services – specifically how the education community has perceived the decision on obligatory electronic additions to the textbooks. There is a general understanding that electronic addition is not stand-alone teaching material and should not be equated with e-textbook. The discussion results gave input for the preparation of the Recommendations for Instructional Material Development for VET teachers (including online publishing).

A session devoted to our project "Instructional Material Development – including online publishing (RIMSO)" was held during the conference. The session was also devoted to sharing experiences from the implementation process within the RIMSO project. The discussion was guided in order to analyze policy developments and new solutions that come out of the Law and rulebooks in the area of instructional material development upgrade and use. More information about the session can be found at the following link: <http://bit.ly/2i65j2T>.



Moodle Moot Conference 2016