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Output O5 Guidelines for general public How to use SP4CE Portal

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1. Executive Summary

This deliverable is the guideline dedicated to general public, potential users of the SP4CE portal. The guidelines are available in English, Greek, Hungarian, Polish and Slovak languages. It contains general information about the SP4CE project, the SP4CE portal idea and functionality, as well as a set of instructions how to use it. Portal and Learning Rooms usage scenarios approach is used in order to explain how to navigate, how to gather ideas for problems to be solved, how to register as a consultant, how to communicate with students, etc.





2. About the SP4CE project

The SP4CE project addresses directly aims and needs identified in Bruges Communiqué on enhanced European cooperation in vocational education and training, especially defined there:

- "improving the quality and efficiency of vocational education and training and enhancing its attractiveness and relevance", and
- "Enhancing creativity, innovation and entrepreneurship".

The project activities are connected also with career-oriented continuing VET (C-VET) principles. All project results and project actions are connected with promoting take-up of innovative practices in education, training by supporting personalised learning approaches, collaborative learning and critical thinking, strategic use of Information and Communication Technologies (ICT), Open Educational Resources (OER), open and flexible learning, virtual mobility and other innovative learning methods.

SP4CE project has been implemented by the consortium composed from different institutions dealing with different educational projects and it has included the partners with different experience and competences. All partners have experience from different European Union educational projects:

- PIAP Przemysłowy Instytut Automatyki i Pomiarów, Poland (project leader, www.piap.pl) is a research institute and has rich experience from coordination and participation in several different vocational education and research projects, additionally PIAP has experience from collaboration with industry enterprises and educational institutions.
- Technical University Kosice, Slovakia (www.tuke.sk) as technical university dealing with university teaching and international cooperation in the area of research and education, fostering links with institutions in private and public sectors and thus responding to their needs and to the needs of society in general.
- PRO-MED sp. z o. o., Poland (http://pro-med.com.pl) has experience from developing an innovative approach to teaching and learning based on e-learning and blended leaning methodology, building the common vision for LifeLong Learning in European countries, collecting and implementing different methods used for educating the staff and learners, discovering methods of promoting access and increasing participation in Lifelong Learning for the staff and learners, gathering flexible education and training methods and approaches for creation a culture of learning.
- ASTRA Zduzenie pre inovacie a rozvoj (http://www.astra-ngo.sk) has significant experience in conducting trainings for managers, has good contacts with other training institutions and already participated in several international research and educational projects.





- TREBAG Property and Project management Ltd, Hungary (www.trebag.hu) has rich experience from development of innovative training materials and methodologies including e-learning (e.g. related to vocational training) and implementation of technology transfer and innovation chain management as well as technology transfers.
- IDEC Aintek Symvouloi Epicheiriseon Efarmoges Ypsilis Technologias Ekpaidefsi Anonymi Etaireia, Greece (http://www.idec.gr) has extensive experience in European projects, either as coordinator or as partner from different European programs and Initiatives. IDEC has consulting experience in developing quality management systems in Greek training centres.

The SP4CE project partners and Bruges Communiqué identify problems with lack of trainings increasing competence of students in areas needed by enterprises and lack of innovative solutions for student-teacher-enterprises collaboration in vocational and high education trainings.

Our answer is multi-user platform for common approach – SP4CE portal which provides the space for:

- Problems to be solved, questions to be answered: these can be published by anybody; within the project the consultants from enterprises published them
- Creation of the teams which want to work towards the problem solution
- Work for teams or individuals to develop the solution
- Mentoring & coaching: support provided by mentors (from among pedagogical staff from various educational institutions) and coaches (from among the enterprises staff)
 & communication with them
- Presentation of developed solutions
- Publishing of the chosen solution

The main benefits of the SP4CE portal usage:

- Enabling repository of the accepted and implemented solutions to the various problems available to general public.
- Supporting an international cooperation towards the solutions to various problems in 5 languages, including English.
- Encouraging young people to work as designers, inventors, and creators.
- Supporting of sense of initiative and entrepreneurship.
- Improving levels of skills for employability of students.
- Introducing new learning and cooperation methods implemented into daily activities of enterprises.
- Increasing opportunities for professional development of all target groups.





- Increasing labour market relevance of learning provision and qualifications and reinforcing links between education, training or the youth fields with the world of work.
- Promoting take-up of innovative practices in education, training and youth by supporting personalised learning approaches, collaborative learning and critical thinking, strategic use of Information and CT, Open Educational Resources (OER), open and flexible learning, virtual mobility and other innovative learning methods.
- Enhancing the professional development of those working or active in the education, training and youth fields by innovating and increasing the quality and range of initial and continuing training, including new pedagogies, ICT-based methodologies and use of OER.





3. The benefits of using the SP4CE system

The main benefit of the SP4CE system is the departure from the fundamental relationship teacher - student relationship teacher - entrepreneur (student) - student. Our aim is to approximate the content of the training to the actual needs of the labour market by actively involving stakeholders (stakeholders) in setting training objectives, specific tasks, and participating in the evaluation of the tasks performed, the training process and the progress of the student.

The selected platform also makes it possible to ensure the transparency of the evaluation process and the ability to collaborate online on advanced electronic projects. Examples of such cooperation are given in the examples enclosed in this manual.

All actions are automatically recorded and can be reused as training materials - examples of good or bad practices.

The system features an open learning eLearning (LMS Learning Management System) and can be tailored to specific tasks through plug-in installations.

The advantage of this solution is the ability to use the system by users at a time convenient for them. This is especially important for those with a professional duty.

Another advantage of the system is the ability to restrict access to system resources. This can be done at the system level and at the level of individual resources. This is important because of the provision of confidential student resources to students as well as the nature of their work in study rooms.





4. Types of SP4CE users

Essentially, the portal (as a system) does not fundamentally define the role that users in the system will play in the system. Assignment of roles usually takes place at the level of particular courses/learning rooms.

The primary group in the system are the students, they are given tasks to solve. The level and nature of the tasks depend on the topic of the training, its scope and the methodology of the training.

The next group is entrepreneurs, in agreement and in cooperation with teachers they propose the subject of training and individual tasks and also participate in training and evaluation.

The last group is the teachers who assign tasks, supervising the learning process. They are also responsible for the communication between system users and the final evaluation.

The developed system enables synchronous and asynchronous collaboration of defined user groups by supporting the exchange of information and resources between system users.

It is also possible to define additional users with specific roles and tasks. An example of such a user is an evaluator whose role is to evaluate the learning process.

Role in LMS Moodle	Role in SP4CE Platform	Permissions
Manager	Main Administrator	Main Administrator performs certain administrative level tasks related to Learning Rooms, users, grade settings, etc.
Course Creator	Local Administrator	Local Administrator can create new Learning Rooms, modify them, including closure.
Editing Teacher	Mentor	Mentors can do anything within a Learning Room, including changing the activities and grading students.
Non-editing Teacher	Consultant	Consultant can perform consultations in Learning Room, and grade students,





		but may not alter activities.	
Student	Student	Students generally have fewer privileges within a Learning Room, they take part in activities defined by mentors.	
Guest	Guest	Guests have minimal privileges and usually cannot enter text anywhere.	

Table 1. Types of SP4CE users





5. Contents of SP4CE information page

The page gathers all the main project results. The page menu consists of following options (Fig. 1-9):

- 1. Homepage
- 2. Welcome to SP4CE
- 3. Partners
- 4. Guides
- 5. Learning Rooms
- 6. Learning Materials
- 7. Conferences
- 8. Downloads
- 9. Contact us

Homepage of SP4CE contains menu entries to other parts of the portal. From that place anybody can contact the portal administrator and request a Learning Room to be opened.

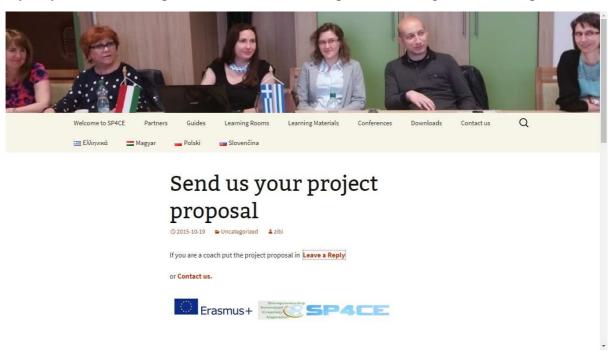


Fig. 1. Homepage

Here anyone can request the Learning Room to be opened. In the "Comment" field there is a place to write about the Learning Room purpose. Besides the description the unregistered user has to provide name and contact details (in this case e-mail). Portal administrator processes the request and creates a user account with the appropriate permissions. Administrator contacts the user using the provided e-mail address and sends further instructions along with login data.





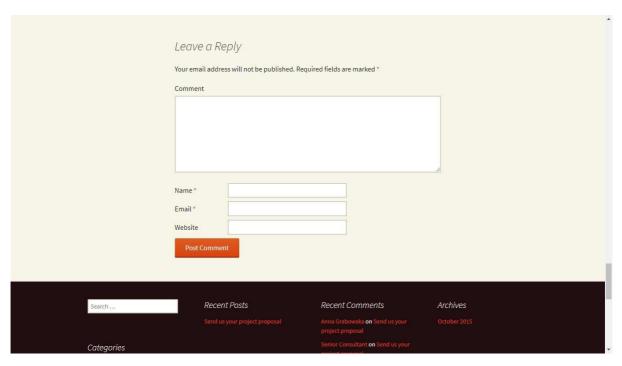


Fig. 2. Request for the learning room from SP4CE portal

Section "Welcome to SP4CE" contains basic information about project goals and objectives.

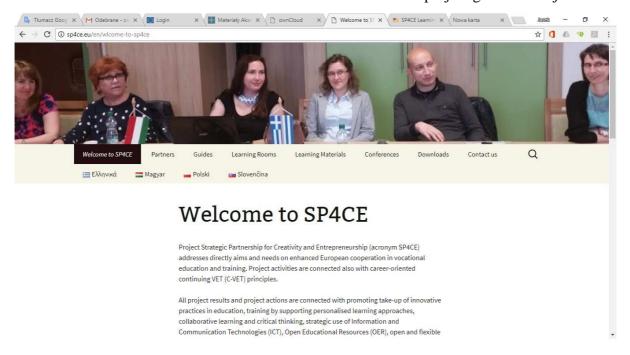


Fig. 3. Welcome to SP4CE

In "Partners" section user can find information about SP4CE project partners and their role in the project.







Fig. 4. Partners

The "Guides" part of the portal assembles learning and working materials mainly for mentors and consultants but also contains guides for different groups of portal users.

Section "Pedagogical Content" contains learning materials prepared in the framework of project work. Topics include information about results and lessons learned from already implemented projects, methods for collaborative learning for creativity and innovation, how to use ICT for teaching and learning, information about creativity techniques, innovative didactics in adult education, collaborative learning from consultants' needs point of view, strengthening competencies with MOOCs, methods of identification of enterprise's needs, online mentoring and coaching, the 'virtual company pedagogical model', open educational resources, how to assessing creative results and information about hot to support personalised learning processes.

"Further reading" section contains link to external resources about the topics presented as "Pedagogical Content"

"Guide for Consultants" and "Guide for Mentors" contains information about roles and permissions of these two user groups.

"Guideline for users" contains general information about portal and its functionalities.





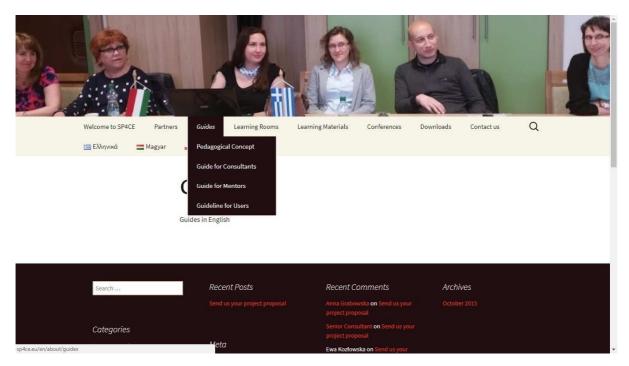


Fig. 5. Guides

The "Learning Rooms" tab is a gateway to the second part of SP4CE portal where all registered users can interact, define tasks and solve problems. The detailed description of this part of portal is provided in the further part of this document.



Fig. 6. Learning Rooms





Under "Learning Materials" user will find several concrete usage scenarios based on specific examples to which the portal was used. You may choose your most suitable educational context. You can also use the search function to look for an example with a specific keyword. Examples are divided into two groups the first group focuses on the more general use of the portal and the second one on specific examples of use of Learning Rooms. The base of examples is constantly being supplemented with new elements related to solving specific issues.



Fig. 7. Learning Materials

Under the "Conferences" tab user will find information about former and future events with topics connected with SP4CE project and portal usage.







Fig. 8. Conferences

At the "Downloads" section there is a collection of information, promotion and training materials related to both the project and the activity of the portal.



Fig. 9. Downloads





At the last section "Contact us" user can find contact details information to the project coordinator and local portal administrators who can create and manage Learning Rooms. Local Administrators manage specific language versions of portal including specific national learning rooms.

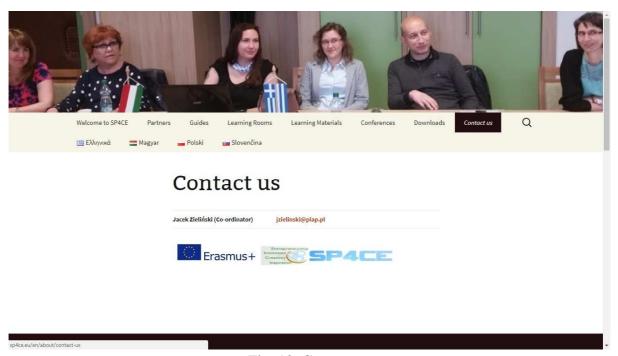


Fig. 10. Contact us

The portal is available in 5 languages: English, Greek, Hungarian, Polish and Slovak. Users can use a full text search over the website and thus over all learning and working material. In order to access portal and all learning materials no registration or login is required, the content is freely available to all users.







Fig. 11. Results of text search over the website





6. How to use SP4CE portal

"Send us your project proposal" is the place where coaches who represent enterprises and industry can send their project proposal. They can use two options "Leave a Reply" (blog) or "Contact us" (e-mail). In both cases the proposal should include a subject of the project and a short description, including deadlines for sending solutions (Fig. 11).

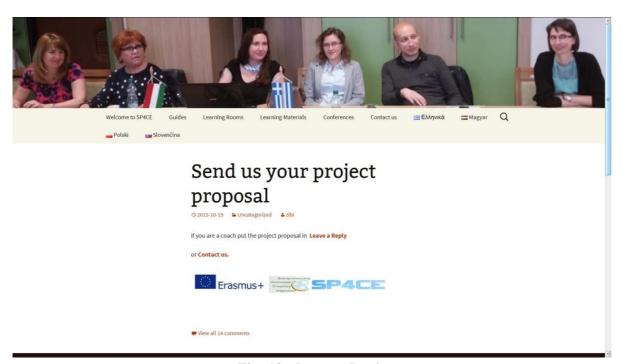


Fig. 12. Leave a Reply

Senior Consultant 2016-04-17 at 07:00

Project proposal: Supporting Moodle beginners by Video-Based instructions in YouTube.

Description: PRO-MED sp. z o. o. is interested in preparing at least min. 10 short films in YouTube which will help a teacher to become Moodle administrator. The results of the project should be presented at the XI International GUIDE Conference 2016: NEW STRATEGIES AND TRENDS.

Example resources: https://www.youtube.com/user/moodlehq/videos

Language: English, Polish

Deadline: 31.05.2016

Fig. 13. An example project proposal





Local administrators enable the visibility of the project's proposal on the portal (Fig. 12).

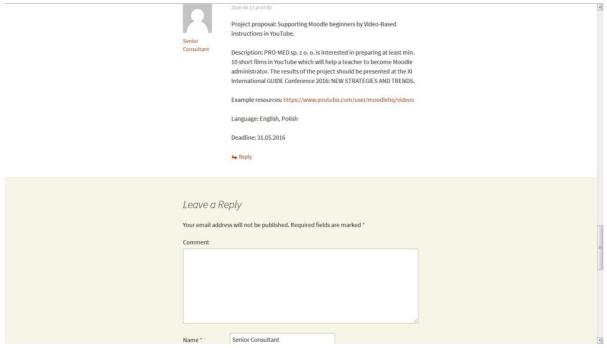


Fig. 14. An example project proposal in "Leave a Reply" The project proposal should be allocated in Learning Rooms (Fig. 14).

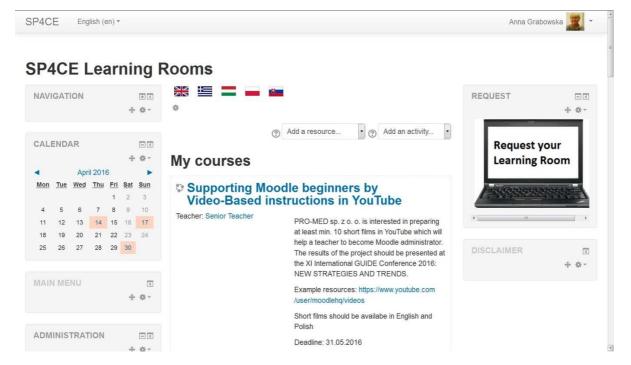


Fig. 15. Example Learning Room (My courses)





7. How to use Learning Rooms

Users must first register to the system to get an access key to access Learning Rooms. There is an online registration option, and the key can be sent via e-mail by the mentor or the system administrator. No special software is needed to be able to use all Learning Rooms features, except for an internet browser at the user's choosing (Google Chrome, Mozilla Firefox, and Microsoft Edge). Solving specific problems and tasks may require special software, but the users have to be notified in advance. Students may use MS Office – MS Word, MS Excel, and MS PowerPoint – when working on project proposals and/or reports.

It is recommended that the local administrators (Table 2) are responsible for ordering Learning Rooms (My courses) within the platform sp4ce.moodle.pl. On the other hand registered coaches can also order their courses. The preferable language for ordering Learning Rooms is English.

Name	Institution	Country	Status
Anna Grabowska	PRO-MED	Poland	Main ADM
Jacek Zieliński	PIAP	Poland	Local ADM
Olga Anagnostaki	IDEC	Greece	Local ADM
Gabriella Kengyel	TREBAG	Hungary	Local ADM
Dana Paľová	TUKE, ASTRA	Slovakia	Local ADM

Table 2. Local administrators sp4ce.moodle.pl platform

Request for a new Learning Room is shown on Figure 15 and Figure 16.





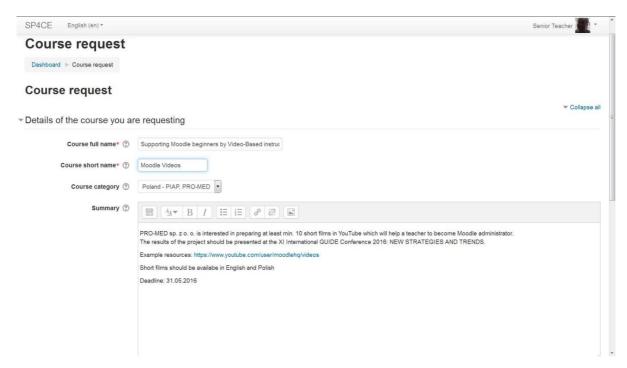


Fig. 16. How to send a request for Learning Room (part 1)

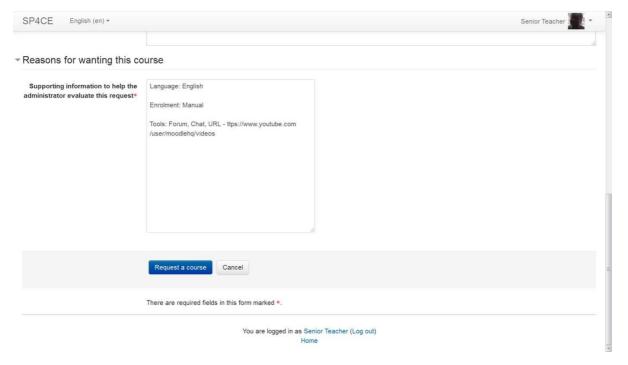


Fig. 17. How to send a request for Learning Room (part 2)

Only the main administrator can approve or reject a new Learning Room (Fig. 19).





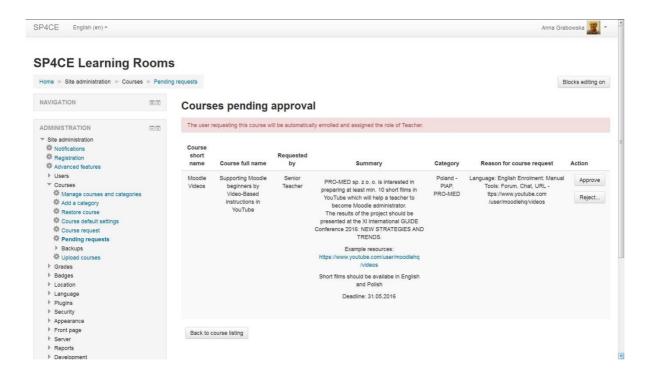


Fig. 18. Learning Room (course) pending approval

The Learning Room/My course can be established according to a local administrator needs (Fig. 20, Fig. 21).



Fig. 19. An example Learning Room (My course) – Info screen





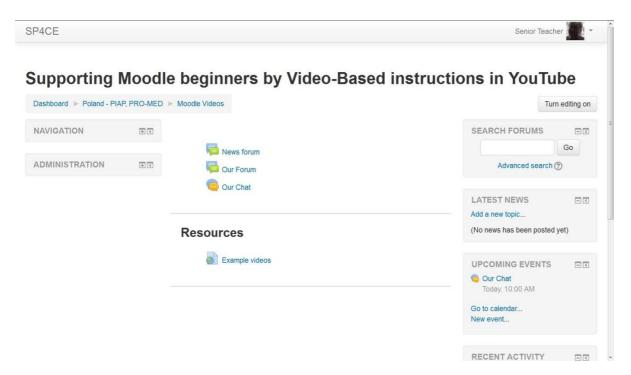


Fig. 20. An example configuration of a requested Learning Room (My course)

While the Learning Room (My course) is ready the message is send to a local administrator (Fig. 22).

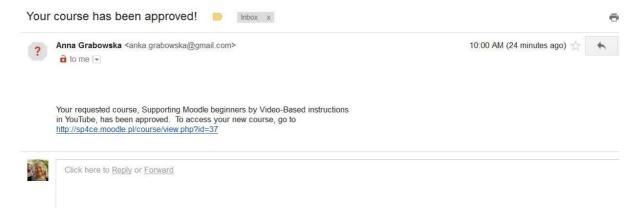


Fig. 21. An example Learning Room (Your course) approval

During work in a dedicated Learning Room all types of users can perform various activities and use various kind of resources. Below a list of allowed activities and types of resources are presented:





In the Learning Room the preferable activities are following:

- Assignment this activity provides a space into which students can submit work for mentor/consultants to grade and give feedback on.
- Chat this activity allows participants to have a real-time synchronous discussion
- Choice this activity allows mentor to ask a question and set up radio buttons which student can click to make a selection from a number of possible responses.
- Forum this activity allows students, mentors consultants to exchange ideas by posting comments as part of a 'thread'. Files such as images and media maybe included in forum posts. The mentor can choose to rate forum posts and it is also possible to give students permission to rate each others' posts.
- Wiki this activity is a collection of collaboratively authored web documents.
 Basically, a wiki page is a web page everyone in Learning Room can create together, right in the browser, without needing to know HTML. A wiki starts with one front page. Each author can add other pages to the wiki by simply creating a link to a page that doesn't exist yet.
- Workshop this is a peer assessment activity with many options. Students submit their work via an online text tool and attachments. There are two grades for a student: their own work and their peer assessments of other students' work.





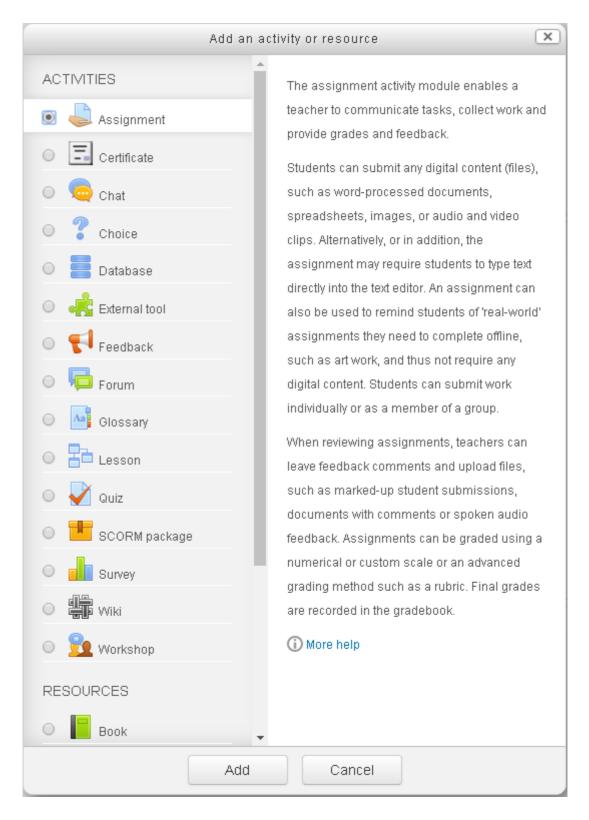


Fig. 22. Adding activity to Learning Room





In the Learning Room the preferable resources/materials can be following:

- Book this module makes it easy for Mentor to create multi-page resources with a book-like format.
- File Folder a folder allows a mentor to display several course resources together. The resources may be of different types and they may be uploaded in one go, as a zipped folder which is then unzipped, or they may be added one at a time to an empty folder on the course page.
- Page a page resource creates a link to a screen that displays the content created by the mentor. The robust Text editor allows the page to display many different kinds of content such as plain text, images, audio, video, embedded code or a combination of all these.
- URL a URL (Uniform or Universal Resource Locator) is a link on the internet to a website or online file. Mentors can use the URL resource to provide their students with web links for research, saving the student time and effort in manually typing out the address.





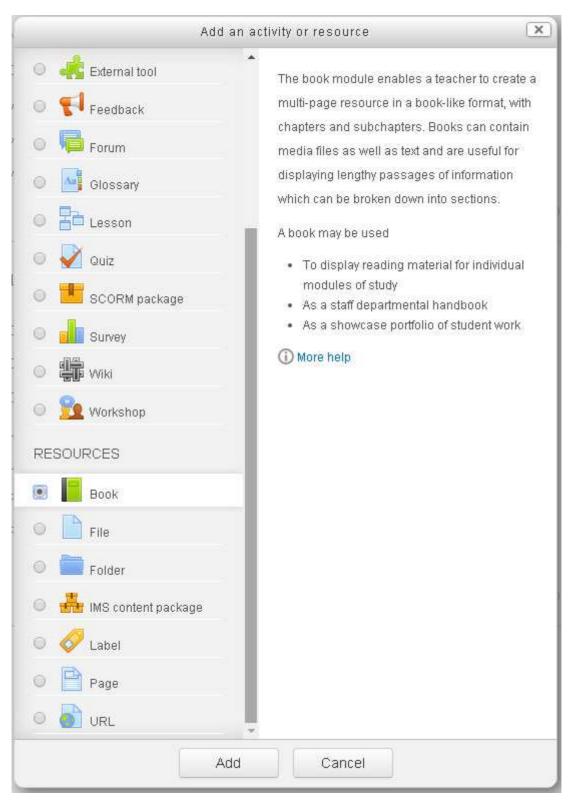


Fig. 23. Adding resources to Learning Room





Typical scenario for the use of a Learning Room:

- A coach (tutor) sets up the structure of the Learning Room in collaboration with the teacher (mentor). At this stage, coach and mentor discuss the existing and useful features and tools of the Learning Room, types of activities assigned to students (project teams, chat, forum, and workshop) and resources (books, files, catalogues, tags, websites, online resources) used in the Learning Room. Also, they both agree how the final performance of the students should be evaluated, and establish access levels.
- Coach (tutor) introduces the participants to the Learning Room, participants then register in the system via e-mail or by another means, and the coach assigns access key to the Learning Room.
- Students may use the available resources and other materials, communicate with the coach, mentor and other students, work on the assigned tasks and/or projects, browse or ask for new information.
- All stakeholders have the opportunity to take the best advantage of their skills and abilities to get the best final performance.
- Coaches (tutors) and mentors can effectively manage all tasks assigned to students.
- Coaches and mentors can also evaluate individual student performance.





8. SP4CE portal usage scenario – writing an IT project

8.1. Purpose of the case study

Today, ICT increasingly penetrates into the various sectors of human life. There are present voices from the students and practice that provided education is not adequately linked to the practice. In order to enable universities to prepare students for practice, it is necessary to involve practice into education actively. In our case, one nice example is presented by cooperation with T-Systems company. T-Systems operates information and communication technology (ICT) systems for multinational corporations and public sector institutions. On this basis, T-Systems offers corporate and business customers integrated solutions for the networked future of business and society. T-Systems provides support to companies in all industries. At T-Systems are guided by three core values – innovation, simplicity and competence. Its solutions for customers is built on efficient and innovative technologies and on a clear understanding of customer needs.

This company actively participates on the educational process at our faculty (Faculty of Economics, TUKE) through practical lectures, exercises and specialized subjects concerned on using specialized software and the company's processes, via internships of our students directly in the company or via various student competitions and the labor supplies. Quite often form of cooperation is work on real projects, resp. participation on the different problems solution through bachelor's and master's thesis. Searching for students for such kind of work is not easy. At present, this process is carried out following: the company offers a problem/cooperation to faculty management. Then the teacher that is interested in such work is searched using faculty's mailing list. Afterwards the teacher tries to find the students. This process takes long time (app. few weeks) when neither knows whether it will be a demand from the students' side for such a project/cooperation. In many cases the result is, that companies stop propose such kind of cooperation to universities despite of interest from the Despite the fact that on both sides of the process is interest in side of universities. cooperation, collaboration often does not occur because, possible participants are not informed sufficiently and on time.

8.2. Implementation of SP4CE portal

SP4CE Portal (available at sp4ce.eu) presents interesting solutions of above described problem. The portal itself contain online information about the project SP4CE itself, guides for particular target groups (coaches, mentors, students), interesting learning materials, contributions to the various conferences and from the point of view of the above-described problem solution special part – challenge/call: "Send us your project proposal". Via this challenge can anyone call for the help. It is tool for looking for people interested in solving different kind of problems or for searching the partners for future cooperation operating in same of different areas. In the case of match of the challenge participants, administrator creates a Learning Room, specialized place, where can all together cooperate after signing up





to a system. This challenge process works on the principle developed within EACEA project "OpenInn2.0: A Knowledge Generating House and e-Assessment Model", where the platform Knowledge Generating House was used to generate groups of investigators and innovative solutions to very specific problems.

Who are the users?

- Coach HR manager working at the T-Systems who defines challenge. The challenge contains information like Project proposal, Description, Example resources, Language a Deadline for achieving the solution/results.
- Mentor university teacher, replies on the challenge, adds comments, proposes time schedule and possible group of students.
- Students university students with interest in challenge topic

How they can use portal?

- Read general information all users have access to general information (about SP4CE project, different kind of guides, learning materials, conference papers, etc.).
- Search for partner among education institutes via link: "Send us your project proposal" can anybody publish a challenge for searching new partners, problem solution.

Resources

There is no need to any special software for using portal sp4ce.eu. The portal is accessible via any web-browser (eg. Google Chrome, Mozilla Firefox, IE, etc.).

The Case

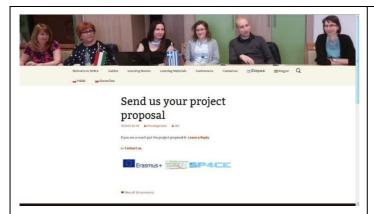
The T-Systems company is global company with large clientele, what means a number of project documents, therefore it searches for potential employees every year. The management of the company decided to prepare their future employees during their study in the project management field. HR department has to find suitable candidates for such cooperation.

How it was realized?

• Using portal sp4ce.eu HR department representative publishes challenge (Fig. 20).







HR Consultant 2016-04-15 at 06:51

Project proposal: How to write a good IT project.

Description: T-Systems looking for motivated young people interested in project management to participate on project proposal development at our company. All resources needed for project proposal development will be provided.

Language: English, Slovak

Deadline: 20.09.2016

Fig. 24 Screenshot of sp4ce.eu portal and example of published challenge

- The university teacher replies on the challenge.
- Via discussion tool at the portal company describes the requirement in more details and discussed it with teacher.
- Since both sides of communication agree on fact, that there is need for materials that cannot be published public, HR manager asks portal administrator to open a new Learning Room (LR) for newly formatted group.

8.3. Findings, recommendations and variations

How it develops partnership cooperation

Through publishing challenge, portal SP4CE presents a gateway for establishing cooperation. Subsequently is this call transformed into LR where the where the cooperation really can take place at several levels using various features of the SP4CE platform. The advantage of this open SP4CE portal is that to one challenge can reply users from different institutions, which further can work together also on other projects in other areas.

Possible risks

- Most significant risk should be lack of interest form users, i.e. despite the publication
 of the call, no one will respond and the challenger will have to use other ways of
 establishing cooperation.
- Another risk may be presented by huge interest in cooperation and following hard decision with whom to establish co-work together.





• Time limitations – in case that the challenger specify the time limit for achieving the reply or solution, it can happen that nobody will manage to log on to the call during expected time.

What not to do / be aware of the following

It is important to define the call very precisely with useful details to avoid misunderstandings. Very general call could meet with disinterest of other users.

