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External evaluation of Pro-VET

Pro·VET

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TK-Eval

Evaluation report

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CONTENTS

EXECUTIVE SUMMARY 3
1 PRO-VET PROJECT 5
2 EVALUATION TASK 7
2.1 Objectives of the evaluation 7
2.2 Database of the evaluation 7
3 FINDINGS OF THE EVALUATION 8
3.1 Implementation/progress of the project 8
3.1.1 In general level 8
3.1.2. From the various perspectives 10
3.1.3. Conclusions and recommendations 22

APPENDICES

EXECUTIVE SUMMARY

The external evaluation of Pro-VET project was carried out by TK-Eval between January and September 2022. Pro-VET project is co-funded by the Erasmus+ Capacity building in the field of higher education program. Pro-VET aims to improve VET in Russia and Serbia through the professional development of teachers via knowledge-building and practice, reflecting the European VET experience. The project is coordinated by JAMK University of Applied Sciences.

The objective of the Pro-VET project evaluation was according to terms of reference to review both outputs and processes of the project including project management, communication and collaboration, and the number and quality of outputs and outcomes. The evaluation was based upon impact, sustainability, effectiveness and validity. The evaluation focused on these issues as well as on implementation and progress of the project work packages, particularly on WP 2 where the actual development work of the project is taking place. This summary is based on the main findings and conclusions of the evaluation.

The realization of the project objectives is divided in two by target areas of the project. In the case of Serbia, the results are being achieved and, in some parts, even exceeded, while in the case of Russia, the final results of the project will not be achieved. The reason for this is the exclusion of the Russians from the project. The termination of Russian partners' participation on 9 April 2022 was a result of EU sanctions being applied to state-funded institutions in Russia because of the war with Ukraine. Before this, the work also progressed at a good pace on the Russian side towards the objectives.

The final examination of the achievement of the project objectives is complicated by the fact that some of the project's activities are still in progress at this external evaluation stage. However, it can be said that the project has reached its numerical objectives well when looking at the outputs from the Serbian side of the project target area. In addition, some of the numerical objectives of the whole project have also been realized well, such as number of published articles and presentations.

One of the best met objectives is the creation and development of E-pedagogy guide as well as all the work done to create VOOCs/e-labs. There are four e-labs in use in Serbia. There are 2-3 courses ready to go in Serbia. These courses are available for the next academic semesters. Serbian stakeholders also see that these courses will be beneficial in many ways, e.g. improving the teacher process, providing new skills and increasing accountability and productivity. o In addition, three e-labs were under creation in Russia, but there is no information whether these work or not.

The sustainability of the developed VOOCs and built VET-ETN network is provided through formal accreditation of the course "development and application of teamwork in everyday teaching practice". The accreditation process was conducted by the Institute for the Advancement of Education, a formal body of the Ministry of Education, Science and Technological Development of the Republic of Serbia. As a result of the accreditation process, the course is included in the Catalog of approved programmes for the Continuous professional development of teachers, educators and professional associates in the Republic of Serbia for the academic years 2022/2023, 2023/2024 and 2024/2025.

There is some evidence on the institutional level impacts in Serbia. Project participants have developed and strengthen skills and that will reflect to the students. It was also mentioned that the participation in the project promoted organizations' brands.

The biggest obstacles/challenges raised were the COVID pandemic and the exclusion of Russians from the project. The pandemic meant that project progresses were slowed down considerably, particularly setting up national e-labs. The pandemic also had a positive effect on the e-learning process. It accelerated and made it more important than it was before.

Some other challenges were also seen. Bureaucracy and project stakeholders' lack of interest to participate in the project has been seen a little bit challenging in some cases. In addition, there have been some challenges related to understanding the division of labour. Eventually, these misunderstandings have been solved with the help of simpler and clearer instruction. But of course, these challenges have overshadowed the course of the project.

In overall, the project has managed to cope well with the huge challenges that have arisen during the operation of the project (Covid 19 and the termination of Russian partners' participation). The project has achieved the desired results in Serbia and partially exceeded them.

1 PRO-VET PROJECT

Pro-VET is a co-funded project with the EU through its ERASMUS+ programme. Project duration is from 15.11.2018 to 14.11.2022. The project's overarching aim is to develop VET teachers' professional skills in Russia and Serbia. This will be achieved through four specific objectives (deliverables):

1. by training HE teachers in European VET pedagogical initiatives and proven best practices,

2. by upgrading technology e-labs capable of producing and hosting Vocational Online Open Courses (VOOCs),

3. by creating online in-service training courses (VOOCs) for VET teachers, and,

4. by setting up a VET-ETN (Educator Trainer Network) to consolidate the role of VET teachers in VET development and to co-design roadmaps for VET development in cooperation with respective Ministries of Education in Russia and Serbia.

The project plan highlights the conclusion that the Russian and Serbian VET systems do not match the challenges facing them and modernisation is required. The tasks are set, although resources (information, HR, legislation, finance) aren't provided sufficiently. The biggest issue is the poor competence and readiness of VET teachers and trainers to interact with and form horizontal communications with European and other international partner colleges as required by national and European strategies. These competencies are useful and needed to break down the tendency of incapsulation and stagnation in VET.

Consortium partners and universities cannot immediately change their entire national VET systems. However, they can add value to the development of lifelong learning and cooperation by closing capacity gaps in their institutions by committing to:

1) upskill selected HE teachers in the target countries on how European HE and VET organisations find decisions for VET policy pointers (2011, 2013), identified as similar national needs for HE and VET development in the two partner countries;
2) foster new forms of socially-responsible and entrepreneurial thinking to enrich the national Russian and Serbian VET systems, through cooperation and evaluation of European best practice in HE and VET;
3) interface with industry stakeholders on their needs and requirements so that VET institutions can create new policy, curriculum and pedagogy to produce effective graduates;
4) build national e-labs for professional development which will produce and disseminate content and courses on European VET policy, practice and methods in Russian, Serbian and English (target languages can be increased with demand);
5) build an online platform with open educational resources (OER) for the target groups – HE teachers engaged in VET teacher training, and VET teachers and trainers;
6) market and maintain the online platform to reach as many VET teaching professionals in Russia and Serbia as possible, using mobile and Internet resources;
7) encourage an online interactive space using consortium websites and social networks such as Facebook, Twitter, Instagram, etc. where the target groups can discuss related issues and share experiences.

The project involves 12 partner institutions, one each from Finland, Netherlands, Ireland, Germany, and four each from Russia and Serbia. Pro-VET project partners are:

- JAMK University of Applied Sciences, coordinator (Finland)
- Aeres University of Applied Sciences Wageningen (Netherlands)
- Warnborough College Ireland (Ireland)
- Universität Bremen, Institut Technik und Bildung (Germany)
- Russian State Vocational Pedagogical University (Russia)
- Institute of Pedagogy, Psychology and Social problems (Russia)
- Moscow State University of Geodesy and Cartography (Russia)
- Tver State University (Russia)
- University of Novi Sad (Serbia)
- University of Belgrade (Serbia)
- Novi Sad School of Business (Serbia)
- The School of Electrical and Computer Engineering of Applied Studies (Serbia).

The structure of the Pro-VET project in terms of Work Packages:

WP 1. Preparation – State of affairs and framework
WP 2. Development:
- WP 2.1 Train the trainers
    - 2.1.1 Train the Trainers programme
    - 2.1.2 Intensive training weeks with Change Lab
    - 2.1.3 In-service training courses design
    - 2.1.4 Test-runs of in-service courses
    - 2.1.5 Learning Diary, videoblogs
- WP 2.2 Open e-learning platform
    - 2.2.1 Digitalisation plans for VET-ETN
    - 2.2.2 E-pedagogy guide for VET-ETN with Change Lab
    - 2.2.3 Operational open access e-learning platform
    - 2.2.4 E-learning lab for teacher training
    - 2.2.5 Exploitation, populating and disseminating e-learning labs

WP 3. Quality plan and assurance
WP 4. Dissemination, exploitation
WP 5. Project Management

2 EVALUATION TASK

2.1 Objectives of the evaluation

The objective of the Pro-VET project evaluation is:

1. to examine both **outputs** and **processes**.
   - This includes project management, communication and collaboration, and the number and quality of outputs and outcomes.
2. The evaluation will be based upon impact, sustainability, effectiveness and validity.

The evaluation will also provide recommendations to facilitate the implementation of future project.

2.2 Database of the evaluation

Database of the evaluation was based on documented material as well as on material that was collected by external evaluators. External evaluators had access to internal documented material of the project. This included e.g., progress and status reports, interim report, WP3 QA material including QA and evaluation plan and reports, internal quality material etc. There was a great deal of documented material available. Feedback material collected by the project itself was also used in the evaluation.

The data collection of the evaluation was directed to two target groups: 1) stakeholders of the project (this was done successfully only for Serbian stakeholders due to the ongoing Russia-Ukraine war. We did not receive any feedback from Russian stakeholders) and 2) the members of the Project Key Partners/Project Team Members. Serbian stakeholder feedback regarding the opinions about developed VOOCs was received via Serbian project partner. This feedback included 24 answers. The Project Key Partner feedback was collected directly from the target groups by evaluators. This was done by English online survey. The Project Key Partner survey was sent by e-mail to 14 persons. Answers were received from 8 recipients. This gave a response rate of 50 %. In addition to this we received one answer to our questions by e-mail and conducted three Teams interviews.

3 FINDINGS OF THE EVALUATION

The findings of the evaluation are discussed in this chapter in such a way that the structure of the review is formed particularly by the implementation of WP 2: train the trainers and open e-learning platform. This is because WP 2 forms the core of the actual development activities in the operation of the project. The review is also guided by the availability of information from different Work Packages. Before diving into the implementation of WP 2, a general overview of the implementation will be made based on the material available and collected.

3.1 Implementation/progress of the project

The project's achievements are reviewed in this evaluation report according to the WP 2 main content. The project is still ongoing at the time of this evaluation, and not all measures have been completed yet. This should be considered when making evaluation observations.

3.1.1 In general level

At the beginning, it is good to summarize some course of the early part of the project. The first phase of project work concentrated on preparing the environment by considering what VET legislation was already in place in the partner countries and what kind of practices within the VET sectors were employed. A review of proven European VET pedagogical initiatives and best practices produced options which could be adopted by the partner countries to form a new framework of VET teacher training in Serbia and Russia.

The second phase of project work was to upgrade technical resources to create e-learning labs at Russian and Serbian partner institutions. These e-labs will enable VET teachers to produce and develop VOOCs (vocational open online courses), through which other Russian and Serbian VET teachers can upgrade their professional skills. Continual review and development cycles of this deliverable will ensure the legacy of the Pro-VET project.

Dissemination was supposed to follow in the final phase by each key partner in Russia and Serbia arranging and hosting a series of roadshow events throughout their home countries in collaboration with their respective Ministries of Education.

At the outset, it should be noted that the project has faced a lot of disruption due to the Covid 19 pandemic and the exclusion of project Russian partners. The termination of Russian partners' participation on 9 April 2022 was a result of EU sanctions being applied to state-funded institutions in Russia because of the war with Ukraine. The pandemic hit at the end of the first half of the project, which delayed particularly building of the e-labs. At a later stage, the Russian partners were suspended from the project, which naturally led to the fact that thereafter the project focused on completing the development work in Serbia.

The realization of the project objectives was examined from the Pro-VET **Project key actors' view** in this external evaluation The Feedback from the Project key actors was collected by survey. They were asked to give opinion on **how well the project**

objectives have been realized (so far). The distribution of answers to the question can be seen in the following figure. For the most part, the realization of the objectives has been seen positively as a whole. Of the presented objectives (a-f), the respondents think that the objective of creating and developing E-pedagogy guide (e) has been best achieved. Also, in-service training courses for VET teacher training (a) and Ensuring after-effect sustainability of the VET-ETN (d) have been realized mostly well or excellently. Setting up national e-labs (b) and Setting up VET Educator's Training Network (VET-ETN) (c) have been realized mostly well. None of the objectives have been realized badly according to the Project key actors. The least realized objective at this stage is Co-designing roadmaps for VET development in Russia and Serbia (f).

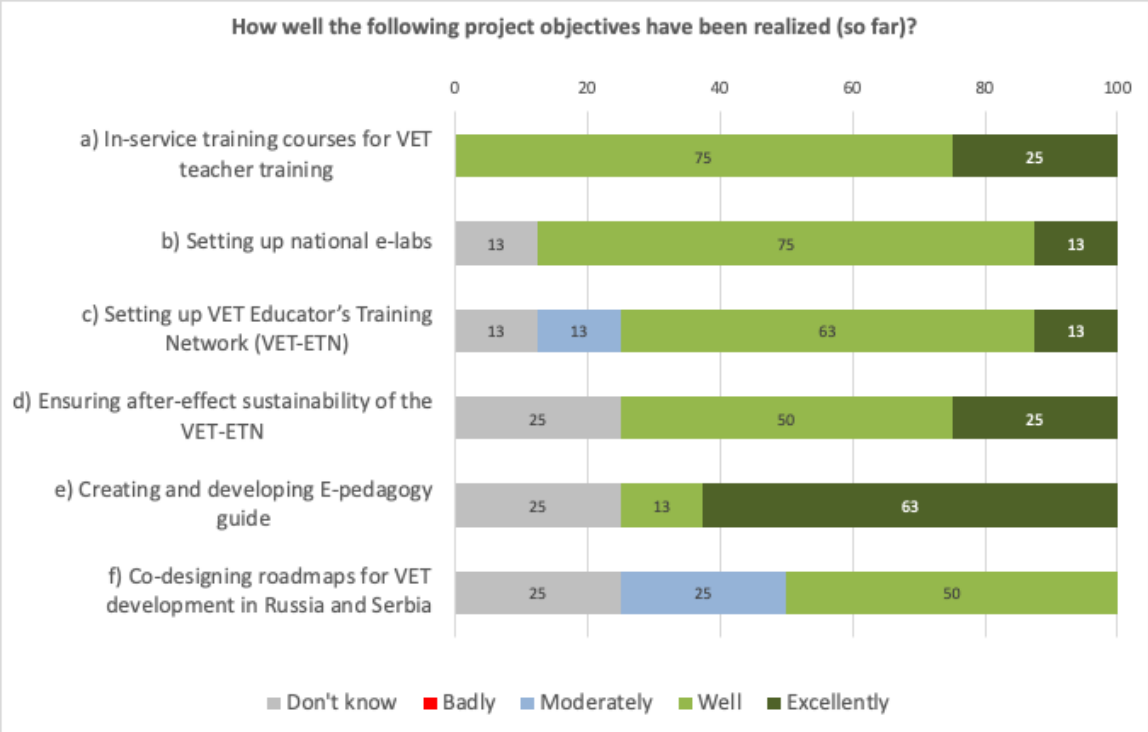


Figure 1. How well the following project objectives have been realized (so far) according to the Project key actors?

Project key actors were asked to motivate their answers - what has been behind the success or failure in achieving the above objectives. As expected, the biggest obstacles/challenges raised were the COVID pandemic and the exclusion of Russians from the project. The pandemic meant that progresses was slowed down considerably as partners were shut or working solely at a distance. However, not all of the impact was negative. It was mentioned that the pandemic also had a positive effect on the e-learning process, despite the bad circumstances that the pandemic had itself. The teachers obtained opportunities for e-learning. Suspending the Russian participation from the project was naturally also a big deal in terms of the operation of the project. It meant that all the cooperation in the project ended with all Russian partners. Other more individually raised issues were, for example that the processes are in progress: *e-pedagogy guide is still being developed - making good progress but work was delayed by COVID.* And *the VET-ETN is still being developed in Serbia*. It was also mentioned that behind the success, there is a lot of effort and work and people committed to the project. However, it was said that *different partners developed at different speeds and abilities.*

The Project key actors were asked to tell **what should be done in order to improve achievement of these objectives** during the remaining project time. These findings are presented below.

- *To continue E-learning process and disseminate activities to other VET schools teachers by media and communication sources.*
- *Close cooperation continues between P4 and P9-P12.*
- *Reviewing the materials, techniques and support all the time.*
- *Less questionnaires, more support.*

The Project key actors were also asked to bring up **best results in the implementation of the project** so far. Most of the answers emphasized success in developing online courses:

- *Excellent online courses have been created in some organisation in Serbia.*
- *Development of e-learning VOOC resources by RS (and RU) partners.*
- *Online course.*
- *E-learning guide, E-learning courses.*
- *The creation and implementation of the innovative programme "Developing skills for tutoring in the e-learning context*
- *To date, more than two thirds of the results have exceeded expectations.*
- *UNS+NSSB learning platform*
- *Comparative report, feedback Serbians received.*

3.1.2. From the various perspectives

Train the trainers

Based on project reporting development of the train-the-trainers (TtT) programme for upskilling teachers of the Consortium in European VET issues was done through the Technical Committee meeting. A programme of training was devised that would be delivered through WP 2.1.2 at forthcoming transnational meetings. There were a 5-day meeting including Change lab training sessions on soft skills, PPD, e-pedagogy design and site visits on European pedagogical practices. In addition to this, there have been 2 five-day meetings in Jyväskylä and Tver.

The TtT programme was the most important activity in the first half of the project as Serbian and Russian teachers went through intensive training during the period. The result is that they were ready to develop VOOCs using modern technologies like learning diaries, video blogs, social media pages, gamification, etc. The consortium included 24 teacher educators from Russia and Serbia that were taking part in the train-the-trainer programme focusing on how to build, develop, and run online training courses for in-service VET teachers. Institution-level working groups met with their lead mentors and other supporting mentors to continue developing their institutions' VOOCs.

The Quality Assurance Manual for in-service training courses is a deliverable within WP3 entitled "Quality plan" of the Pro-VET project (Professional Development of Vocation Education Teachers with European Practices). The manual is primarily focused on evaluation training courses, e.g., VOOCs, to get feedback from teacher-students about the quality of the course and the competence of the teacher trainer. It summarizes all assessments to ensure the highest possible quality and to implement adequate quality assurance and control. It also provides three questionnaires about the

evaluation of training, trainers, and knowledge transfer. This manual defines procedures for evaluation objectives and tools, specifically:

- Evaluation of participant reaction,
- Evaluation of participant learning,
- Evaluation of knowledge transfer, and
- Evaluation of organizational impact.

The results of the evaluation process of the course developed by UNS and NSSB (Effective team working for VET teachers according to EU practice) are available at the internet links[1]. In overall, the feedback received from the participants is very good. For example, the quality of the learning materials was found good by 81 % of the participants. According to the results, more than 94 % of participants said that the course fully met their expectations.

In addition, the course developed by UNS and NSSB has received formal accreditation from the Institute for the Advancement of Education, a formal body of the Ministry of Education, Science and Technological Development of the Republic of Serbia. As a result of the accreditation process, the course is included in the Catalog of approved programmes for the Continuous professional development of teachers, educators and professional associates in the Republic of Serbia for the academic years 2022/2023, 2023/2024 and 2024/2025. According to the latest information, NSSB has announced the enrollment on their course about team working and they have received applications very well. The enrollment is limited to 45 applicants according to the accreditation requirements and that will be achieved and expanded more likely. This course will be completed within the duration of the project.

Both UB and ATUS/VISER are currently exploring ways of gaining similar recognition for their courses. Even though accreditation of any sort goes beyond the stated requirement of the project, it is testament to the quality of the products that the consortium has produced.

Open e-learning platform

According to the project plan the capacity building will be focused on the core team of 8 HEIs with emphasis on the academic staff - teacher trainers and researchers support when deemed relevant. The ICT capacity upgrading will affect the 8 HEIs by developing modern interactive e-learning labs for each institution to be used in teacher training, course development and as a showcase learning environment. The in-service open training courses via an e-learning platform will be tested in three iterations, with continuous development benefitting at least 450 VET and HE/VET teachers and work-based trainers during the project lifetime.

Because of the pandemic the delivery and setting up of the e-labs were delayed, particularly in Russia. The hardware was delivered by the summer 2020, but the employees were in lock down and therefore unable to start e-labs. In autumn 2020 things started to move quickly, and by October-November project had operationalized

[1] https://www.youtube.com/watch?v=OGCeClnlUx8;
https://www.youtube.com/watch?v=JBLCoA4O_qk;and
https://www.youtube.com/watch?v=n9AJzLQFM18

all e-labs. There were three e-labs in Russia and four in Serbia. As soon as the e-labs were operational they were able to launch/load their work that they had been doing home (during the lock down phase in Russia). The alfa testing[2] started in early 2021. After that came beta testing[3] phase. This phase was also important for semantic learning and analysis which form essential guidelines for the project. This semantic learning and analysis process was introduced to target groups and then beta testing could actually be started. By that time the Russian partners were already suspended, so only Serbian partners were able to take that onboard. Serbians are using these VOOCs now. There are three courses that are all or almost ready for third iteration. So, Serbian partners have done beta testing, semantic learning and analysis and they have made the changes that the analysis highlighted. Therefore their 3rd version is expected to be ready for release in these moments. This is within the timeframe the project has set. At the moment, at least 2 of the 3 courses are ready to go. Courses are available for the next academic semester starting in September (in Serbia).

One interesting question is that how far project got with the WPs and objectives in Russia before the Russians were suspended from the project. The Russians were said to be at the same stage as the Serbians colleagues at that point. With the main deliverable, their VOOCs, online courses, they were going through Beta testing. They had real students going taking courses and evaluating them. The evaluation has no information on whether the Russians have progressed beyond the beta testing phase after being suspended from the project.

The Serbian partner of the project has collected some stakeholder feedback for this external evaluation regarding the developed VOOCs. This feedback can be seen more precisely in the appendix of this evaluation report. The feedback seems to be positive overall. According to the 24 responses it can be said that online course design and tutoring as well as team working has been seen positively. It was also asked in the feedback survey that what could be the main benefits of implementing the selected course in your organisation. The following issues emerged:

- *Greater employees competencies.*
- *Improved teaching process, a higher percentage of teamwork in vocational education.*
- *Improvement of the teaching process.*
- *Professional competence at a higher level.*
- *New knowledge and skills.*
- *Increase accountability and productivity.*
- *Application of innovative methods and tools in teaching.*

Setting up VET Educator's Training Network (VET-ETN)

The project's overarching aim is to develop VET teachers' professional skills in Russia and Serbia. This will be achieved through four specific objectives (deliverables). One of which is to set up a VET-ETN (Educator Trainer Network) to consolidate the role of VET teachers in VET development and to co-design roadmaps for VET development in cooperation with respective Ministries of Education in Russia and Serbia.

[2] Alfa testing is basically a technical review of the product. Checking that all the material can open and it is placed correctly, checking that all the links take you to where you supposed to go etc.
[3] In beta testing there are real users of the product involved. In this case, it also means that you can test that whether the product/course is pedagogically sound.

It was mentioned that a VET-ETN is basically a Russian invention and put in the project to benefit the Russian stakeholders. After suspending the Russians from the project the realization of this goal depends on what is achieved with regard to Serbia. The Serbian partners have created a network of other schools and colleges and major employers in their catchment areas, Novi Sad and Belgrade. VET Educator's Training Network is formed around the four partner institutes of Pro-VET in Serbia. This network is unofficial in nature. The built network includes learners, administrative and teaching staff of VET providers, employers, and professional associations. The stakeholder interaction activities have resulted in signed memorandums of understanding, and the developed network consists of 39 institutions with which the project partners have signed those agreements. Actually, it can be said that the Serbs have created a much bigger and wider network than the project anticipated that they could do. There is no information on whether concrete cooperation has seen the daylight within the network or whether the network has remained symbolic. However, the networks are local, but the purpose of doing was national.

Project Management, cooperation etc.

Based on project reporting project management procedures were set in place during the opening months of the project. As well as those deliverables created under WP 5.1 and WP 5.2, the partner agreement documents (WP 5.3) were agreed and finalized by the deadline set in the Grant Agreement. The situation was different with the partner countries. In Russia and Serbia, each institution required a bilateral agreement due to local legislation. An exchange of emails began with each partner institutions and continued until all demands were satisfied and all questions answered. Questions and demands arose largely due to differences in semantic understanding. The final signed agreement was received by the project coordinating partner, JAMK UAS, on 25 April 2019 and notification of such to the EA was sent, along with electronic copies of all agreements the following day.

The MS Teams platform was chosen as the project's PMS and internal communications tool. Although encouraged to use the Teams platform as widely as possible, some communications continue to flow by more traditional email although this seems to be happening less and less as the project go on. Social media (SM) accounts were created for the more popular platforms of Facebook and Twitter. This created problems for only 1 partner. In Germany, universities are apparently not allowed to use these outlets for official purposes.

In both of the management forums of the Steering Committee and the Technical Committee, it was agreed that in addition to the mandated meetings as part of the series of transnational meetings in the Detailed Description of the Project, each committee would meet virtually on an ad hoc basis if required.

Project management is supported by Quality Assurance. In WP 3 a Quality Assurance Team (QAT) has been established, parameters and procedures set for its work. From the first meeting it began collating feedback from the consortium to fulfil WP 3.4. The QA&E plan (WP 3.1) was created, reviewed and accepted as a dynamic policy document, as was the QAM for in-service training courses (WP 3.3), into which was inserted a practical section about semantic learning analytics (WP 3.2).

The results of the internal quality assurance process also give some information on the success of the project management. The following figure illustrates the feedback given

in the partner meetings. This figure is from the latest partner meeting for which feedback was available. The results are very similar from all the previous partner meetings. An overall picture of the feedback is positive. Very many things related to project management and the smooth running of the project seem to be in order according to this feedback. In addition, communication and collaboration have received good grades in the assessments of the project partners.

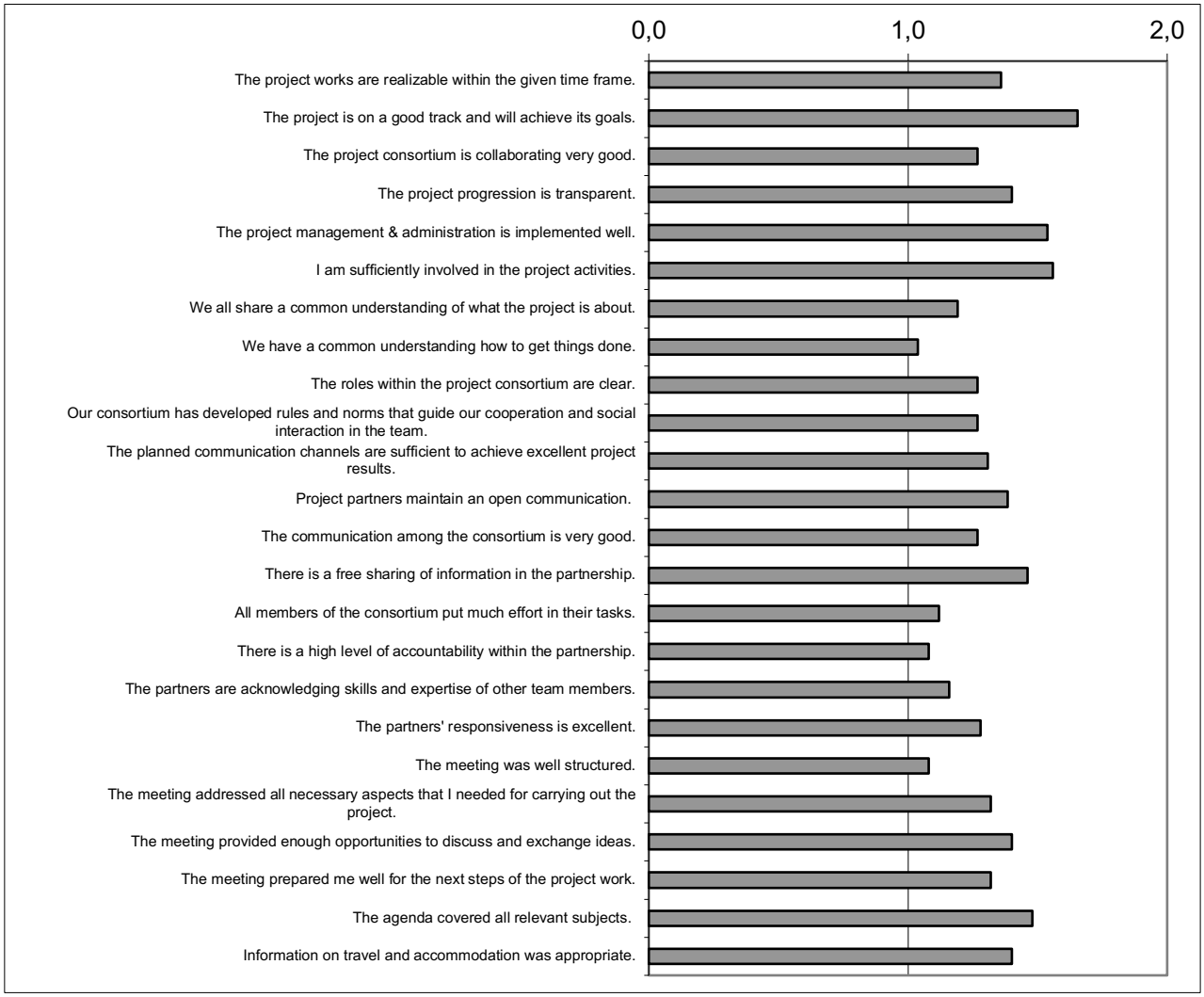


Figure 2. The feedback from the partner meeting. The average values can range from -2 to +2. (Internal evaluation of the project).

In addition to this project partner feedback, **Project key actors' opinion on possible challenges in the project implementation/processes** was also collected by our evaluation survey. The following figure shows the respondents' views on to what extent these are recognized in the project. The overall picture shows a positive response towards the presented matters (possible challenges). Particularly, Pro-VET objectives are set realistically and there seem to be enough active participants in the project, objectives are guiding the project's practical work and it has not been hard to implement new ideas through the project. Project management, communication and collaboration have been carried out without major challenges, but some of the respondents have seen

minor challenges in these matters. Instead, Russia-Ukraine conflict has been seen as a major challenge in the project by almost all respondents. Half of the respondents have seen bureaucracy and project stakeholders' lack of interest to participate in the project quite challenging.

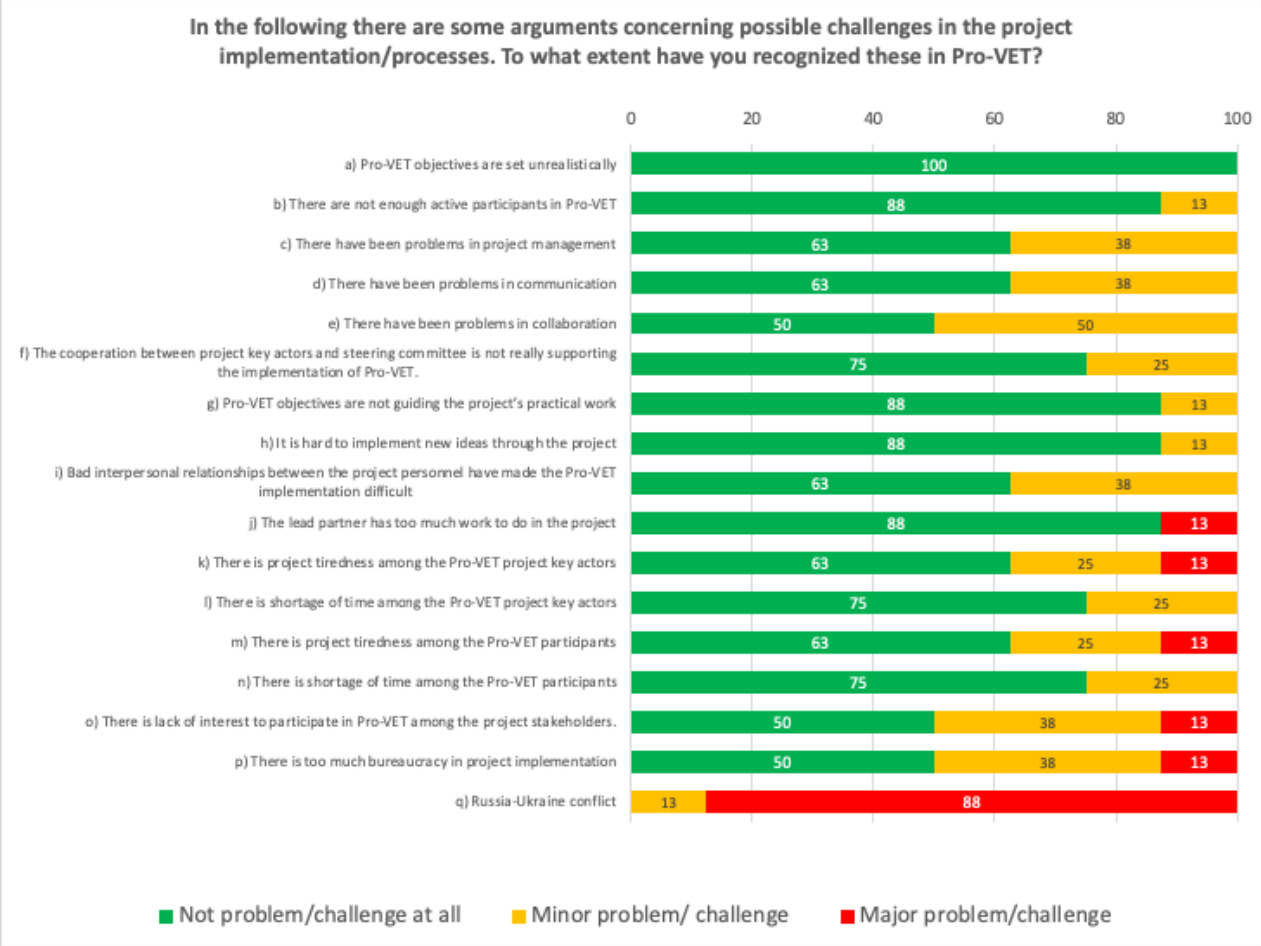


Figure 3. Project key actors' opinion on possible challenges in the project implementation/processes.

Project key actors were asked to motivate their answers to the above questions. Most of the comments were related to the Russia-Ukraine conflict. It was mentioned that Russia-Ukraine conflict resulted in Russian partners suspension at the direction of the EU in March 2022. It was emphasized that it has/had a strong negative impact on the project. The following types of challenges were also mentioned by the project key actors:

- *Lack of interests for online learning*
- *Many of us who work (worked) in the project have also heavy workload elsewhere and although the project got extension the other workload did not diminish.*
- *There were some communication issues with some partners (and a lot of illness) which contributed to delays or lack of progress on their part.*
- *In my opinion, the project develops well and all foreseeing activities implemented in a proper way.*

The processing of the next survey question is almost a direct continuation of the previous one. The respondents were asked if there are any other problems/challenges that make project implementation difficult. Most of the respondents did not see such problems. Mainly, it was said that there are no challenges except for the one caused by

the Russia-Ukraina conflict. It was also mentioned here that some challenges are related to participants' lack of time for online learning, because they are constantly online with their students. It was also said that some partner organisations were not committed to the project and did not complete the work that was required from them. This caused unnecessary stress and extra work for the others.

Project key actors were asked to tell what should be improved in the project work and what are the development needs. The following types of development needs were mentioned:

- *Clear division of tasks and increasing communication so that everyone understands the joint aims, tasks and responsibilities.*
- *To be prepared for the final reporting.*
- *More understanding for the needs of participant in project and respect for their educational background.*
- *The activities should be done according to the project design.*
- *The remaining platforms need some last-minute catching up to do, but they have seen the level of the other VOOCs and know what is required of them.*
- *I would like to thank our project coordinator. He has great management and personal skills that is the most important in development of project activities.*
- *We are extremely pleased and grateful with the level of this project, the quality of the partners and the deliverables.*

Apart from the Russians suspended from the project and the Covid 19 pandemic some other (more minor that above mentioned) challenges were also recognized in the project. As it was earlier mentioned there was some challenges related to understanding the division of labor. One of the Serbian partners was supposed to work as work package leader, but it didn't work at first. Their role was to lead the train the trainer programme. There was misunderstanding in the roles. Finally, that particular partner leaded the WP with the help of simpler and clearer instruction.

For one partner, challenges were caused by the fact that the project personnel had too much work (in overall, not in project) to do. It led to some minor challenges in timing of the work.

One lesson from the project has also been that costs of the transnational meetings may rise high if these meetings are hold in one of most expensive countries like Finland. It sometimes means, that allowances may not fully meet actual expenses. Therefore, it was mentioned that planning transnational meetings should be done little more carefully in future.

Action for visibility

In the first 18 months of the project the partners have been undertaking a number of steps for establishing the visibility of the project and most specifically for: (1) raising awareness regarding the Pro-VET project scope and expected results; and (2) for stimulating interest regarding the Pro-VET tools and technical framework.
These activities have included: Project website, Facebook, Project leaflet in three language, Project videos, Articles, Posts, Presentations.

Overall impacts and sustainability

According to the project reporting during the first 18 months of the project implementation the achieved impact & sustainability was centered around 3 main activities: 1. Informing and engaging stakeholders by actions and visibility tools; 2. Development of the Pro-VET methodology supported by expert community and policy-makers to ensure utilization from regional and national Ministries of education and maintain sustainability of project. 3. Development of the E-labs (3 in Russia & 4 in Serbia) and the components of the platform for delivering continuous professional development (CPD) courses for VET teachers and trainers countrywide to assure future funding by reaching and attracting all national VET teachers and trainers to the e-learning platform via Internet and mobile.

The results of the internal quality assurance process also give some information on the impact of the project on organizational level. It was asked from the participating universities that what has been the impact of the project on institutional level or personal level. The following impacts have been reported by them:

- The main contribution to the development of the university was made through the creation of new e-learning environment for teachers and trainers – e-laboratory for producing video courses and e-learning materials.
- The in-house project participants improved their communication and digital (media) skills. This has been mainly achieved through ongoing collaboration and cooperation with the European and domestic partners, and through participation in the pilot work on the development of the e-course.
- The creation and implementation of online courses, seminars, training programs, etc., addressed to graduate students, college teachers and university professors.
- Staff developed and strengthened such skills as: online teaching, online curriculum development, online assessment, video-blogs development.
- The promotion of the university's brand in the national and regional market of professional training services for representatives of the vocational education sector
- Contributed to building a modern ICT infrastructure for creation and promotion of e-learning content, as well as for the professional development of the university team members involved in the project implementation.

Later project achievements can be addressed in the Serbian side of the project. This can be done by following the so-called roadmap goal and purpose. The purpose of the roadmap is to communicate the direction and steps of VET development for Serbia in line with European policies and practices. It also aims to ensure the project's sustainability through the synergy of the participants committing to work together. They form a common strategy for the future sustainability and policy support of the VET Educators' Training Network (VET-ETN). The national roadmap for Serbia will serve as a joint sustainability plan and be approved at the national level. In order to perform an efficient roadmap for VET development, particularly in the Republic of Serbia, it is essential to present it as a step-by-step process with several phases (material produced by the project):

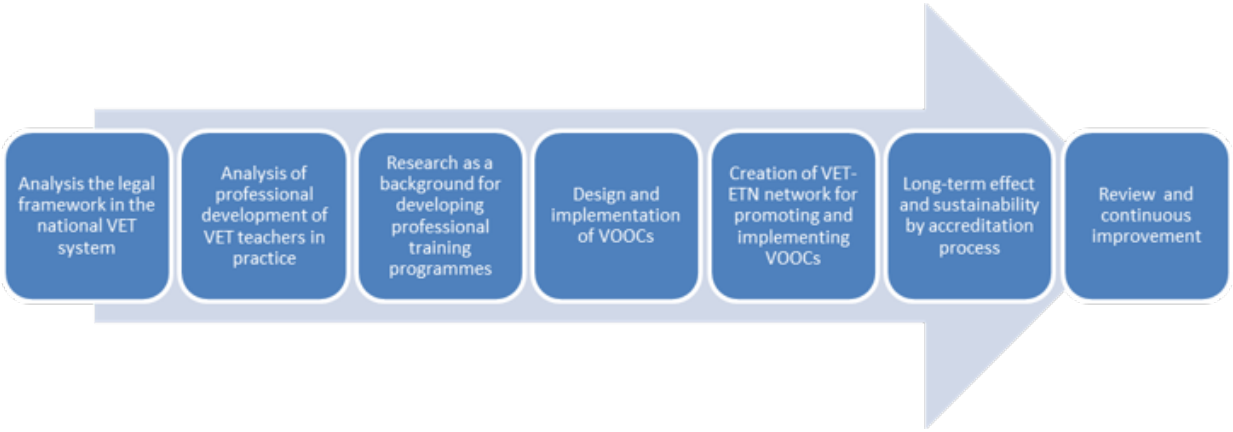


Figure 4. Project Roadmap as a step-by-step process (Project material).

The Serbian partners have progressed in the steps described above to the implementation of VOOCs, creation of VET-ETN network and accreditation process. The long-term effects remain unknown at this evaluation stage, but they can be expected because these steps have been successfully taken for it.

Project performance can also be viewed from the indicator perspective. In the following tables there is an overview of short-term and long-term impact indicators of the project. The table showing short-term impact indicators also includes some realization information of the set indicators. Long-term tables show only the target groups and indicators, because there is no data available on the realization of the indicators, at the moment.

Table 1. Overview of short-term impact indicators.

Short term impact	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
Creation of the open e-learning platform and VET Educators' Training Network providing information, materials, networking opportunities and in-service training courses	HE institutions of Consortium, VET sector, HE institutions dealing with vocational teacher training	8 partners signed sustainability agreements on the VET-ETN; open e-learning platform established	Availability of information, training and collaboration opportunities for development of VET education with European practices to meet the needs of work-life in Russia and Serbia
The realization of the indicators: open e-learning platforms established in both target countries. Operative in Serbia, no information if they are in operation in Russia.			
New capacity and expertise in VET teacher training	HE institutions of the Consortium	24 teacher trainers capacitated in European VET practices and pedagogical methods including e-pedagogy: 12 for Serbia and 12 for Russia	Semantic learning analytics on collective learning of teacher trainers
The realization of the indicators: realized in Serbia. No information from Russian side.			
Adopting the	VET providers of	VET-ETN has MoU	Feedback and

European practices to VET teachers/trainers of post-secondary non-tertiary education and attaining better qualified training force according to the industry needs	post-secondary non-tertiary education; large companies with training centres, HEIs associated with VET sector, social partners and local, regional & national qualification agencies.	for endorsement and recognition of the VET-ETN in-service training courses from 60 stakeholders	comments gathered during the MoU process
The realization of the indicators: MoUs signed in Serbia. No information from Russian side.			
Professional development of VET teachers and work-place trainers on new learning and teaching approaches and methods in VET	Working VET teachers, work-based trainers and HEIs connected with VET teacher training	6 in-service training courses for VET teachers designed, tested in 3 iterations with continuous quality upgrading and accessible via e-platform 450 teachers completed in-service training course	Quality Assurance process of in-service training courses Feedback surveys on course relevance and accessibility and functionality of the e-learning platform
The realization of the indicators: realized in Serbia. No information from Russian side.			
Development of modern, interactive e-learning labs for each institution to be used in teacher training and as a showcase learning environment	HE institutions of the Consortium	8 equipped modern, interactive e-learning labs established in partner institutions to support teacher training and to operate as a showcase and demonstration environment	Quality specifications and multi-usage plans
The realization of the indicators: 3 e-labs in Russia and 4 in Serbia. Operative in Serbia, no information if they operate in Russia.			
Awareness and understanding of the adaptation potential of European VET policies and practices in Russia and Serbia	Partner countries: HE/VET providers, VET practitioners as well as educational and government representatives	6 policy dialogue workshops and networking events (3 in Serbia, 3 in Russia) and 2 National Conferences (1 in Moscow, 1 in Belgrade) Two National Roadmaps for VET development validated by the Regional and National ministries with a support letter.	Participation of Regional and National ministries and key stakeholders in the policy dialogue activities and the National VET Roadmap Conferences in Moscow and Belgrade; Media coverage
The realization of the indicators: no reliable available aggregated information on these in order to make assessment. 1 national Roadmap in Serbia.			
Policy recommendations and insights for EU on continuance of the application of European instruments in VET	European Commission	Pro-VET position paper and other publications	Feedback of relevant EU networks to the drafting process and dissemination level of the position paper and other publications

teacher training in enhancing the professional development of VET teachers.			
The realization of the indicators: intended to be completed later during the end of the project			
Awareness and understanding of the adaptation potential of European VET policy and practice in Russia and Serbia	Researchers and practitioners of VET	4 articles published in academic and professional journals 4 presentations at International conferences	Academic level of journals; dissemination in media
The realization of the indicators: In the monitoring material of the project this numerical objective has been exceeded many times. The numerical objective of presentations has also been fulfilled (presentations for example 18.6.2021., 22.10-23.10.2019, 27.11.-29.11.2019)			

Table 2. Overview of long term impact indicators.

Long term impact	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
Modernisation and internationalisation of national post-secondary non-tertiary education of the two Partner Countries	HE &VET Community at large in the two Partner Countries	Minimum 500 institutions	Discussions, workshops, conferences, forums of new ways of modernisation and internationalisation, partially with Open Space Technology
Open access and routine usage of the Pro-VET results (Training Manual, Methodology, Information)	VET Community at large in the two Partner Countries	Minimum 300 institutions	Greater awareness and flexibility in VET learning pathways relevant to European approaches
Opportunity to enhance mobility both for lifelong learning and geographical mobility	VET Learners at large in the two Partner Countries	Minimum 10 000 learners	Transparency, visibility and transferability of their learning outcomes for mobility purpose both at national and transnational levels.
Transnational mobility with VET providers from Russia and Serbia	Member State VET providers	Minimum 100 providers	System of agreements of HEIs with VET providers on the base of ECVET or units of learning outcomes for qualifications
More visibility and transparency in the knowledge, skills and competence acquired by the labour force	Industry	Minimum 1000 enterprises	Better qualified training force according to the industry needs (learning outcomes will be defined according to the industry input)

The credit transfer becomes possible with Russia and Serbia	Member State VET learners	Minimum 1000 learners	New experience and new units of learning outcomes
Modernisation and internationalisation of national post-secondary non-tertiary education of the two Partner Countries	HE &VET Community at large in the two Partner Countries	Minimum 500 institutions	Discussions, workshops, conferences, forums of new ways of modernisation and internationalisation, partially with Open Space Technology
Open access and routine usage of the Pro-VET results (Training Manual, Methodology, Information)	VET Community at large in the two Partner Countries	Minimum 300 institutions	Greater awareness and flexibility in VET learning pathways relevant to European approaches

3.1.3. Conclusions and recommendations

Conclusions

The realization of the project objectives

- In terms of achieving the objectives, the situation is divided in two by target area. In the case of Serbia, the results are being achieved and, in some parts, even exceeded, while in the case of Russia, the final results of the project will not be achieved.
    - The reason for this is the exclusion of the Russians from the project. The termination of Russian partners' participation on 9 April 2022 was a result of EU sanctions being applied to state-funded institutions in Russia because of the war with Ukraine. Before this, the work also progressed at a good pace on the Russian side towards the objectives.
- The final examination of the achievement of the project objectives is complicated by the fact that some of the project's activities are still in progress at this external evaluation stage. However, it can be said that the project has reached its numerical objectives well when looking at the outputs from the Serbian side of the project target area. In addition, some of the numerical objectives of the whole project have also been realized well, such as number of published articles and presentations.
- According to the Project key actors, one of the best met objectives is the creation and development of E-pedagogy guide as well as all the work done to create VOOCs/e-labs.
- There are four e-labs in use in Serbia. There are 2-3 courses ready to go in Serbia. These courses are available for the next academic semesters. Serbian stakeholders also see that these courses will be beneficial in many ways, e.g. improving the teacher process, providing new skills and increasing accountability and productivity.
- The sustainability of the developed VOOCs and built VET-ETN network is provided through formal accreditation of the course "development and application of teamwork in everyday teaching practice". The accreditation process was conducted by the Institute for the Advancement of Education, a formal body of the Ministry of Education, Science and Technological Development of the Republic of Serbia.
- As a result of the accreditation process, the course is included in the Catalog of approved programmes for the Continuous professional development of teachers, educators and professional associates in the Republic of Serbia for the academic years 2022/2023, 2023/2024 and 2024/2025.
- There is some evidence on the institutional level impacts in Serbia. Project participants have developed and strengthen skills and that will reflect to the students. It was also mentioned that the participation in the project promoted organizations' brands.
- In addition, three e-labs were under creation in Russia, but there is no information whether these work or not.
- As for the objective Setting up VET Educator's Training Network (VET-ETN), after suspending the Russians from the project the realization of this goal has relied on what is achieved in Serbia. The Serbian partners have managed to create an unofficial Employers network in two regions. There is a memorandum of understanding between the actors and this network is wider than expected.

Other perspectives

- The biggest obstacles/challenges raised were the COVID pandemic and the exclusion of Russians from the project.
- The pandemic meant that project progresses were slowed down considerably, particularly setting up national e-labs. The pandemic also had a positive effect on the e-learning process. It accelerated and made it more important than it was before.
- Suspending the Russian participation from the project as a result of EU sanctions being applied to state-funded institutions in Russia is a big deal in terms of the operation of the project. It has meant that all the cooperation in the project ended with all Russian partners. On the other hand, there have been much more focus now on getting results in Serbia.

Conclusions

- In overall, the project has managed to cope well with the huge challenges that have arisen during the operation of the project (Covid 19 and the termination of Russian partners' participation). The project has achieved the desired results in Serbia and partially exceeded them.
- Bureaucracy and project stakeholders' lack of interest to participate in the project has been seen a little bit challenging in some cases.
- There have been some challenges related to understanding the division of labour. Eventually, these misunderstandings have been solved with the help of simpler and clearer instruction. But of course, these challenges have overshadowed the course of the project.

Recommendations:

- *The effects of the project will probably be even more in Serbia as it is now. It is good to record these effects at a later stage. For example, how large number of learners developed courses and e-labs eventually will reach. And what is achieved in the end with the created VET-ETN network.*
- *The project data does not clearly show how important role the project's EU partners have played in terms of the results. To what extent did Serbians benefit from benchmarking? Additional light could be shed on this in the final report of the project.*
- *Due to the huge challenges of the operating environment, the progress of the project was challenging, but it responded well to the challenges considering the circumstances. It's hard to see anything the project itself could have done better in addressing these challenges.*

ANNEX 1. Stakeholder feedback collected in Serbia: Evaluation of stakeholders' opinions about developed VOOCs:

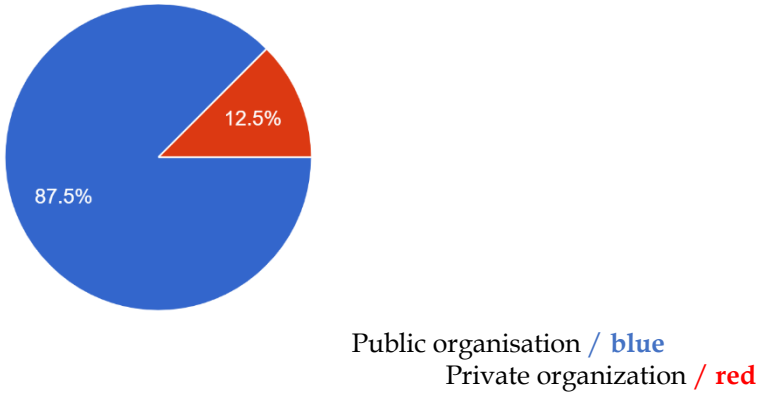


Figure 1. Organisation type

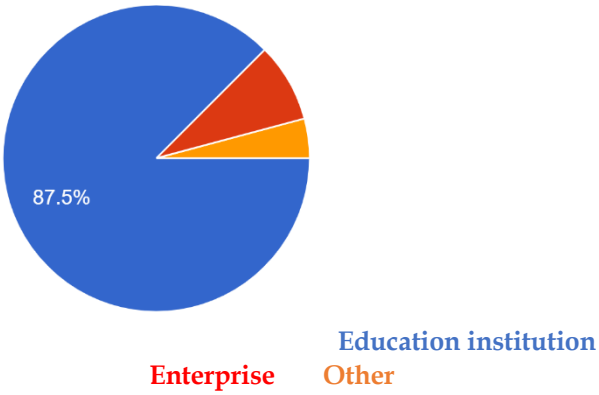


Figure 2. Organisation type II

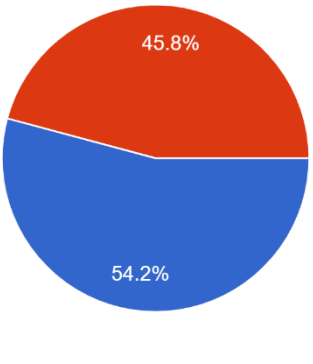


Figure 3. Would your organisation be interested in training courses?

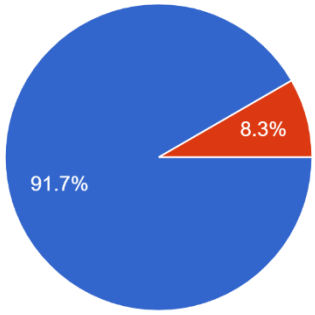


Figure 4. Have you or someone of your staff participated in some non-formal training/course?

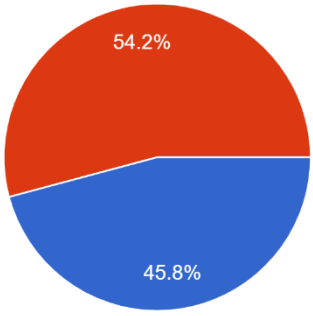
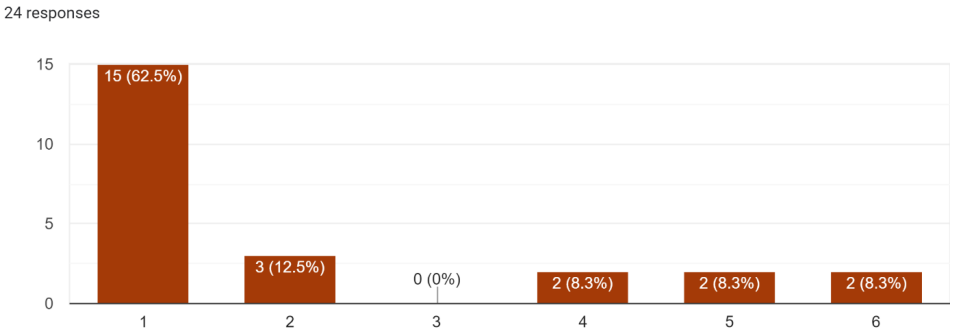


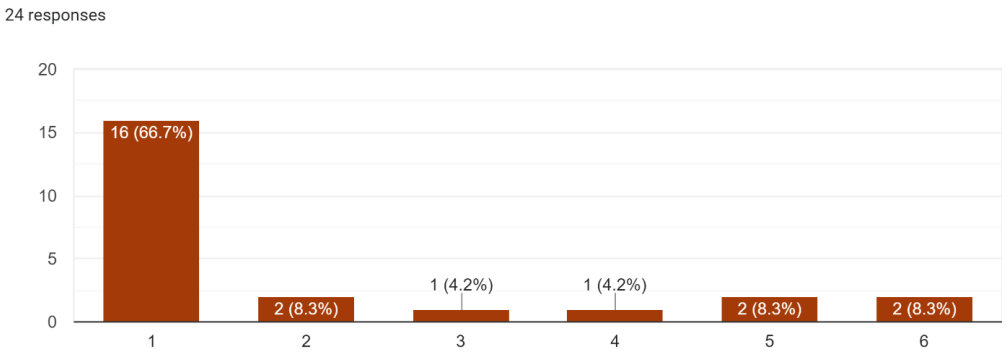
Figure 5. What kind of training/courses do you prefer more?

What is your opinion about the offered courses: (1-Completely interesting; 6-Completely uninteresting):

1. EFFECTIVE TEAM-WORKING FOR VET TEACHERS IN ACCORDANCE TO EU PRACTICE (Developed by P9-UNS (one part) and P11 – NSSB)



2. ONLINE COURSE DESIGN AND TUTORING
(Developed by P12-VISER)



3. INTERACTIVE TEACHING STRATEGIES IN VOCATIONAL EDUCATION

(Developed by P9-UNS (second part) and P10-UB)

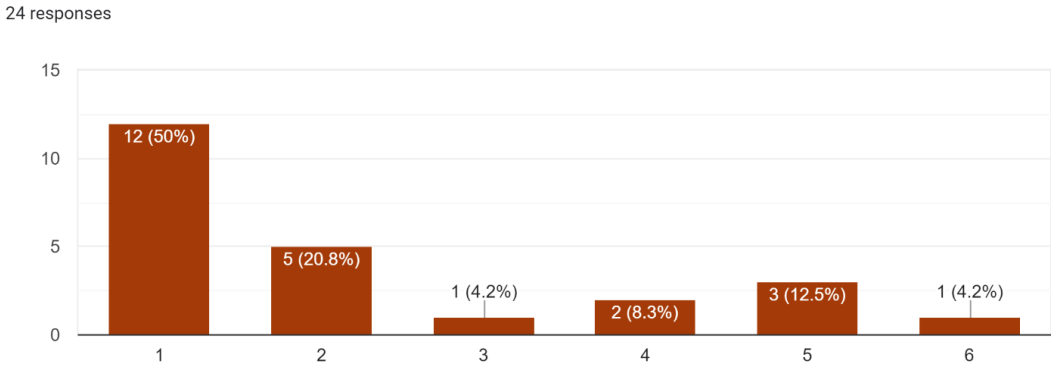
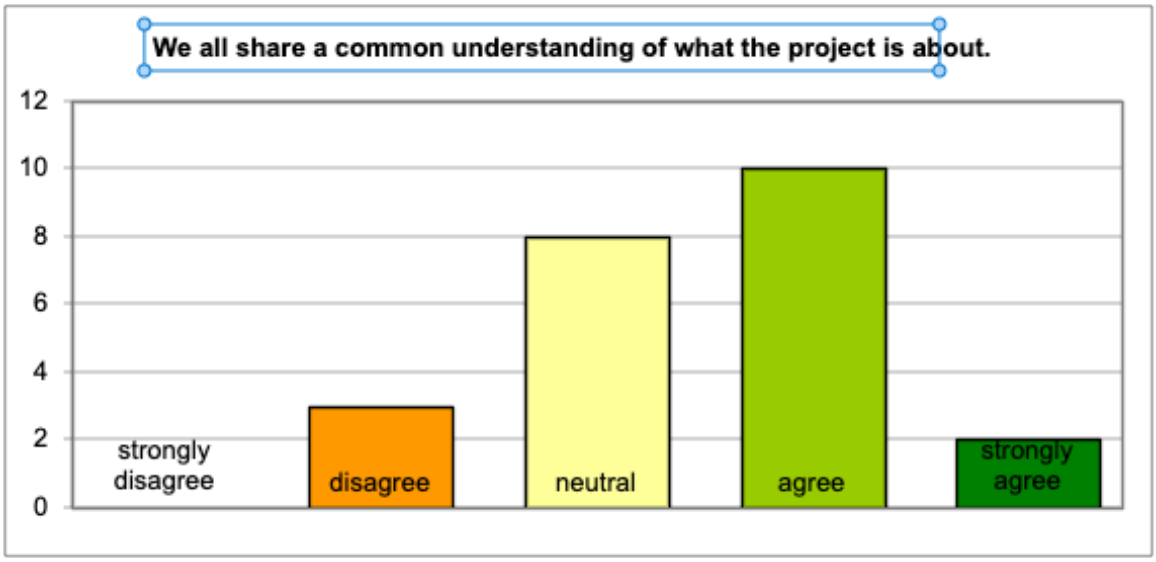
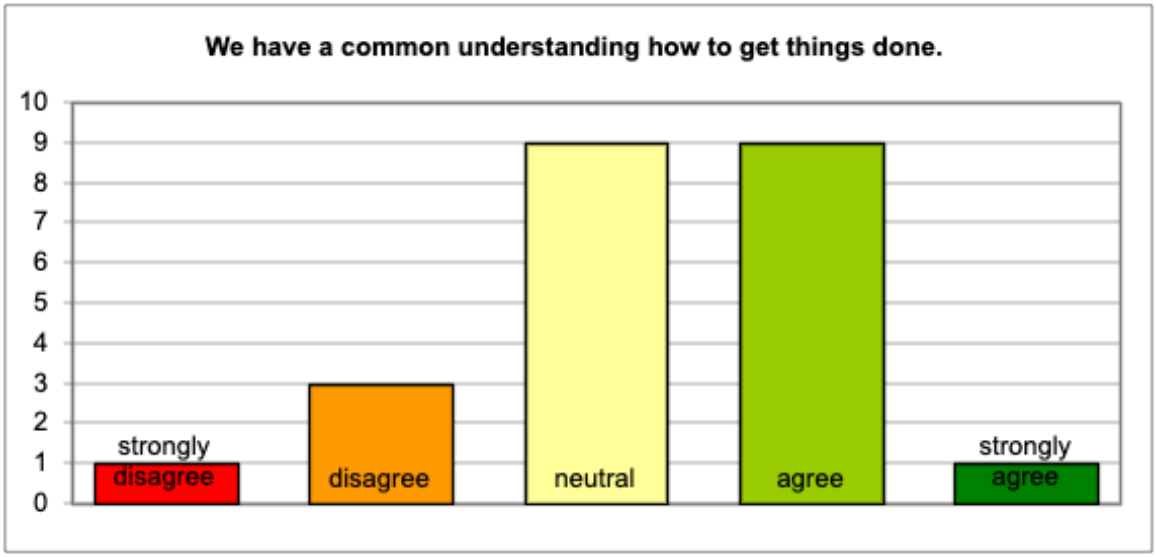
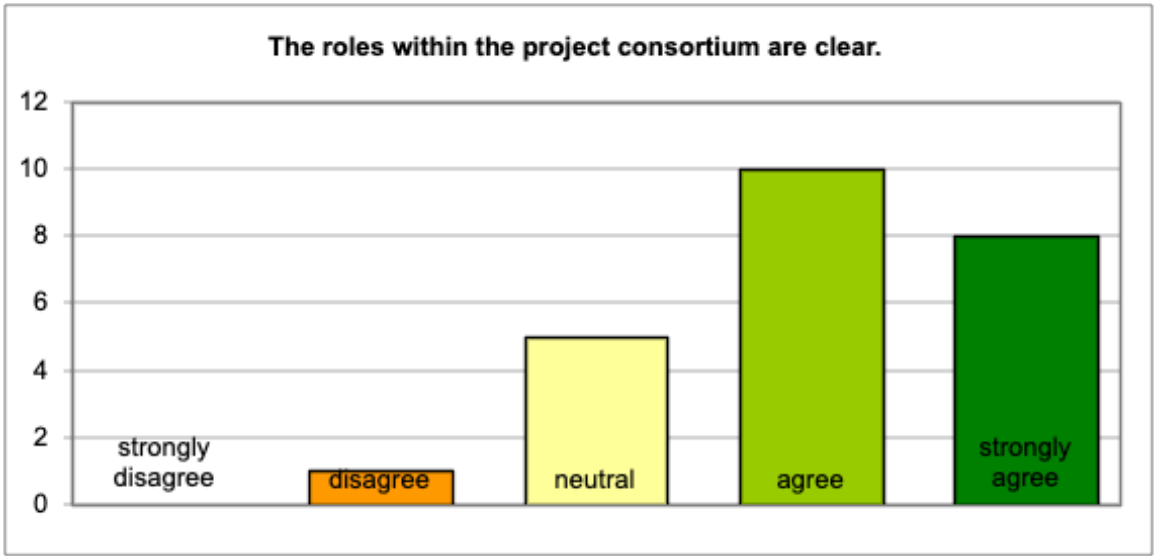


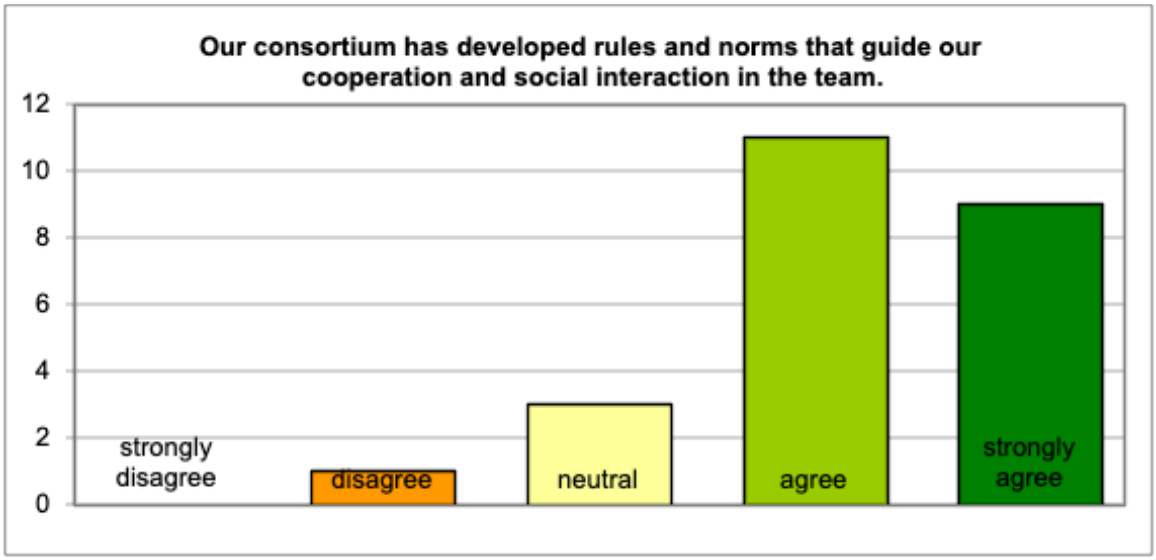
Figure 6. What is your opinion about the offered courses: (1-Completely interesting; 6-Completely uninteresting):

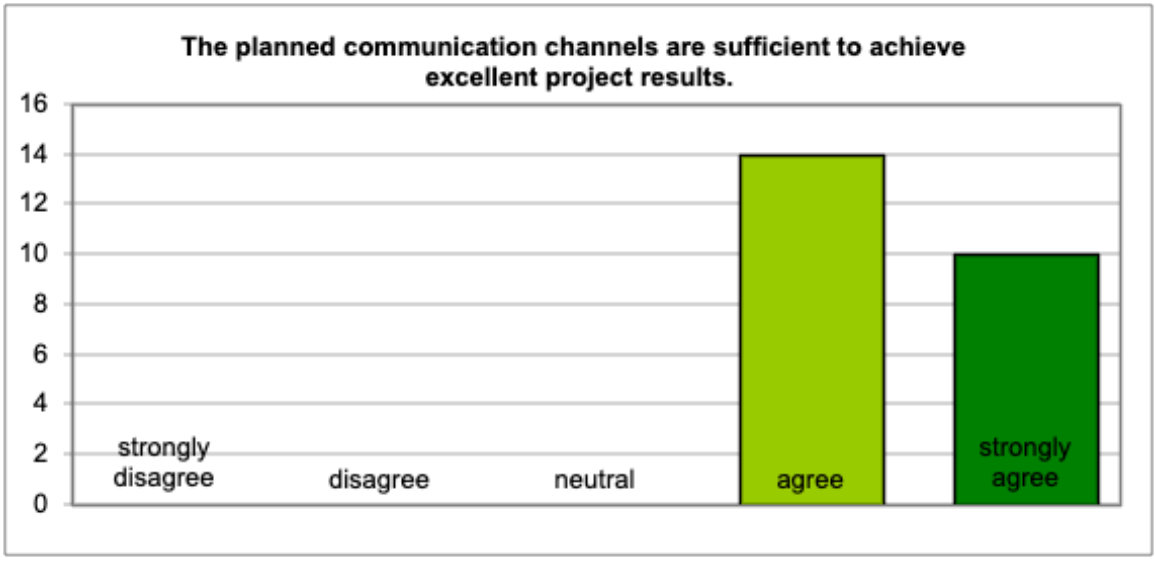
ANNEX 2. Some results of the internal quality assurance process.

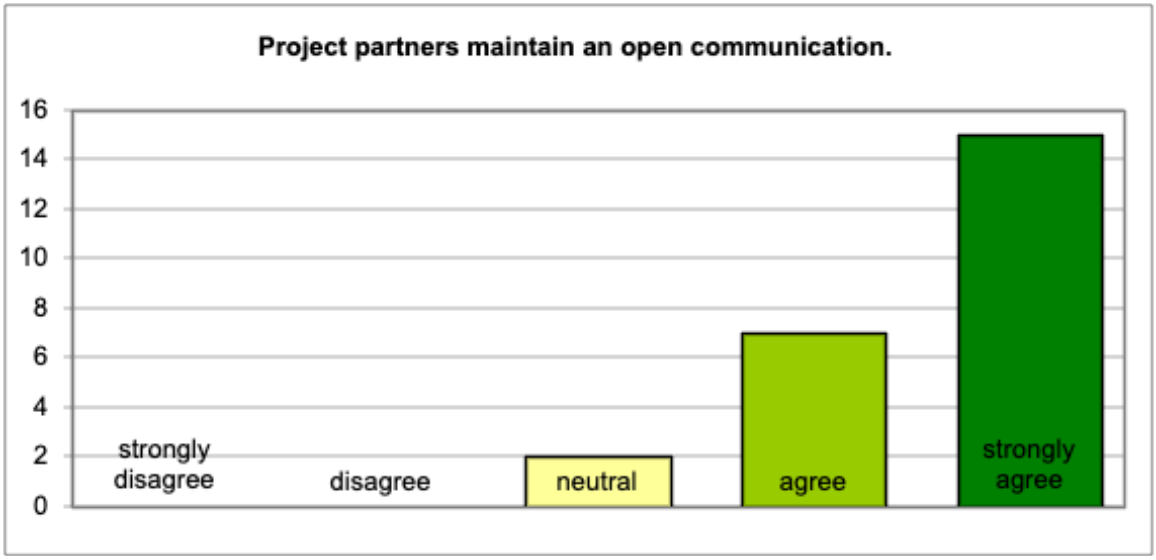


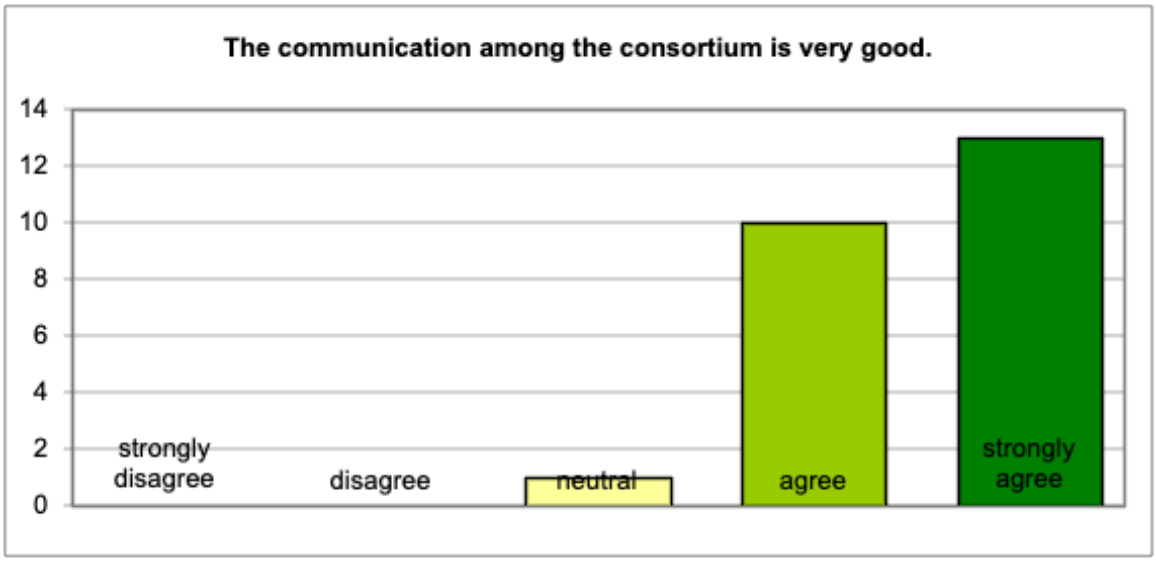


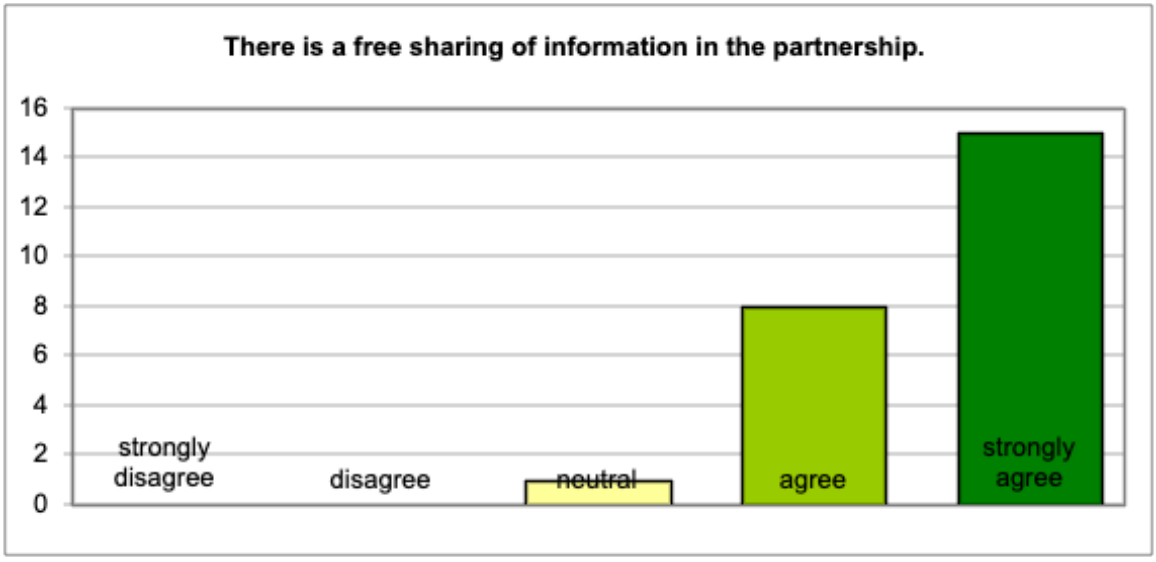

The roles within the project consortium are clear.
12
10
8
6
4
2
0
strongly disagree
disagree
neutral
agree
strongly agree


Our consortium has developed rules and norms that guide our cooperation and social interaction in the team.
12
10
8
6
4
2
0
strongly disagree
disagree
neutral
agree
strongly agree


The planned communication channels are sufficient to achieve excellent project results.
16
14
12
10
8
6
4
2
0
strongly disagree
disagree
neutral
agree
strongly agree


Project partners maintain an open communication.
16
14
12
10
8
6
4
2
0
strongly disagree
disagree
neutral
agree
strongly agree


The communication among the consortium is very good.
14
12
10
8
6
4
2
0
strongly disagree
disagree
neutral
agree
strongly agree


There is a free sharing of information in the partnership.
16
14
12
10
8
6
4
2
0
strongly disagree
disagree
neutral
agree
strongly agree

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