

Accelerating Western Balkans University Modernization by Incorporating Virtual Technologies

VTech@WBUni

WP3 - Deliverable 3.4

2nd QUALITY ASSURANCE REPORT

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1. Introduction

This document presents the Second Quality assurance report for the Erasmus VTech project. Quality assurance for this reporting period was led by South East European University with contribution of all partners.

It is based on Quality assurance monitoring and periodic assessment of progress towards project goals. Data collection is provided during this reporting period, qualifying the project management to maintain the project's quality, based on four main pillars:

1. Overall evaluation
2. Event evaluation
3. Document evaluation
4. COVID 19 Impact evaluation

Overall evaluation

In the scope of overall evaluation for this reporting period this reporting project, we tried to answer these questions:

- Which are the main achievements of this project according to your opinion till this moment?
- Which are the main opportunities for improvement regarding the WP that you are leading?
- Which are the main opportunities for improvement that other institutions can contribute regarding the WP that you are leading?
- A short description about reaching milestones and objectives regarding the WP that you are leading.
- A short description of the perceived risks (if any) regarding the WP that you are leading.

Main achievements of this project till this moment

Below are listed main achievements till this moment based on overall partner input:

- Introducing impactful curriculum in the targeted countries
- Number of trained academic staff for universities
- Number of trained academic staff from the trainers

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- Number of established laboratories per university
- Number of equipment per laboratory
- Videos and others materials from these events
- Raising awareness on VR/AR. Although at initial level, VR labs make possible to experience solutions that can enhance classroom experiences and expand opportunities at all levels of learning
- Integration of students in the training
- Staff and students' trainings on VR technologies and being able to implement VR courses
- The establishment of Vtech hub and the trainings provided to both academic staff and students

Main opportunities for improvement regarding WPs (provided by each WP leader)

The Table below presents the main opportunities for improvement regarding WPs, as declared by each WP leader:

Partner	Main opportunities for improvement regarding leading WP
P1 - Aleksander Moisiu University (UAMD)	
P10 - Lodz University of Technology (LUT)	Organize more activities that increase the reach of people.
P11 - University of Ljubljana (UL)	
P2 - Polis University (Polis)	There are no improvements needed
P3 - European University of Tirana (UET)	
P4 - Epoka University (EPOKA)	We are not WP leaders, still we support training activities
P5 - University of Prishtina (UP)	No one
P6 - University for Business and Technology (UBT)	
P7 - Mother Teresa University (MTU)	
P8 - South East European University (SEEU)	More frequent meetings and discussions among the partners about reporting of the progress achieved (the data should be reported on the Quality Reporting Table by all partners)

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P9 - University of Tartu (UT)	Further communication and testing new topics seems to improve our activities
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Main opportunities for improvement that other institutions (other participants) can contribute regarding the WP (provided by each WP leader)

The Table below presents the main opportunities for improvement that other institutions can contribute regarding the WP:

Partner	Main opportunities that other participants can contribute regarding the WP
P1 - Aleksander Moisiu University (UAMD)	
P10 - Lodz University of Technology (LUT)	All the consortium could follow and share the posts in the Vtech project social media
P11 - University of Ljubljana (UL)	
P2 - Polis University (Polis)	No contribution needed
P3 - European University of Tirana (UET)	
P4 - Epoka University (EPOKA)	We are not WP leaders, still we support training activities
P5 - University of Prishtina (UP)	Preparation of VTech courses
P6 - University for Business and Technology (UBT)	
P7 - Mother Teresa University (MTU)	
P8 - South East European University (SEEU)	Higher percentage response on the distributed event evaluation forms (both staff and students).
P9 - University of Tartu (UT)	In my opinion, the current involvement of all institutes are admirable. Hence, I do not have any particular comment here.

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Short description about reaching milestones and objectives regarding the WPs that are leading:

This Table provides main achieved objectives for each WP:

Partner	Short description about reaching milestones and objectives regarding the WPs
P1 - Aleksander Moisiu University (UAMD)	
P3 - European University of Tirana (UET)	Preparing project dissemination plan- Dissemination plan timely delivered. Building visual identity of the project and creation of the website and social network pages for promotion - done Preparing marketing materials and publications - done Dissemination through events such as roundtables, workshops, trainings - most are done and still continuing with others Dissemination to various stakeholders - partly done and still continuing till the end of the project.
P11 - University of Ljubljana (UL)	
P2 - Polis University (Polis)	So far the WP is finished
P10 - Lodz University of Technology (LUT)	
P4 - Epoka University (EPOKA)	We are not WP leaders, still we support training activities
P5 - University of Prishtina (UP)	Selection of pilot courses at each HEI that will use Vtech Developing and delivering Vtech-supported courses
P6 - University for Business and Technology (UBT)	
P7 - Mother Teresa University (MTU)	
P8 - South East European University (SEEU)	Quality committee established (OK) Preparation of project quality plan (OK) External Quality Expert hired (TO BE REALISED SOON: Nov 21-Apr 22)

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	Progress measure of the project (regular evaluation of the events as well as summary prepared by the QA committee) Assuring project quality for each activity by developing project QA policy for VTech teaching and learning (OK)
P9 - University of Tartu (UT)	I believe conducting more hands-on workshops will help not only reaching the milestones faster but will improve the quality of them.

Perceived risks (if any) regarding the WPs (provided by each WP leader)

Partner	Perceived risks regarding the WPs
P1 - Aleksander Moisiu University (UAMD)	
P10 - Lodz University of Technology (LUT)	The continuous lock down of some countries may postpone some activities which might require an extension of the project.
P11 - University of Ljubljana (UL)	
P2 - Polis University (Polis)	No risks
P3 - European University of Tirana (UET)	
P4 - Epoka University (EPOKA)	We are not WP leaders, still we support training activities
P5 - University of Prishtina (UP)	COVID
P6 - University for Business and Technology (UBT)	
P7 - Mother Teresa University (MTU)	
P8 - South East European University (SEEU)	A slight delay on the reports as a consequence of the delay in the establishment of VR Labs and trainings.
P9 - University of Tartu (UT)	Obviously remote teaching and remote workshops have their own limitations, however, I do not foresee any high risks.

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Events Evaluation

The results of VTech events evaluation are presented in this section. In the scope of this reporting timeline, three events took place:

- VTECH Student training – ‘VR Intro, The Challenge for 3D Interaction Design, Getting familiar with 3D UIs, Spatial, Designing 3D Story Flow, Facebook Horizon, How to Wireframe 3D Interactions and Prototyping’ (14-16 April, by Lodz University of Technology, Online)
- 4rth Steering Committee Meeting (May 20th 2021, SEE University, Tetovo, North Macedonia)
- VTECH Roundtable Meeting (21 May 2021, Mother Teresa University, Skopje, North Macedonia)
- VTECH Teacher Training – ‘Evaluation of UX in VR and VR sickness’ (May 26th 2021, by University of Ljubljana (UL), Online)
- VTECH Summer School (5th – 9th of July, UBT, Kosovo)
- VTECH Teacher Training – ‘Training Using UNITY for creating 3D Content’, October 12-13, 2021, Carried by UMT, Skopje, North Macedonia.
- VTECH VR/AR HACKATON (15 October 2021, by UMT, Skopje, North Macedonia)
- VTECH Teacher Training – ‘3D Object Creation for VR through Photogrammetry’ (November 22-23, 2021, by SEE University, Epoka University, Albania)

VTECH Student training

The VTECH Student training was held online, at Epoka University from 14 till 16 April, 2021 by Lodz University of Technology. Main impressions for this event are as follows:

- The event was great.
- The use of more advanced software would make the experience better.
- Gather more frequently.
- Overall, I left very satisfied. I wish there was a bit more time for discussions between the participants as a whole (i.e. not just inside assigned groups), but it is understandable given the time frame and intensity of the event.
- Everybody is different so this might not be for everyone; but maybe shuffling the participants in different group between the independent challenges (i.e. the Greek temple) would be a good way to both get to know more people and have the ideas discovered with the first group of people be brought to the next and then the next... It

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felt to me like each group very soon developed a style that they got stuck with for the entire 3 days (which might be a good thing or not)

- The challenges we were assigned after the presentation of each key idea were interesting and a good way to absorb what was taught.
- Thanks!
- Nothing to add

Figure 1 shows the overall event rating in terms of organization/management and Figure 2 shows the overall event rating in terms of outcomes.

How satisfied you were with (1 = not satisfied, 5 = very satisfied):

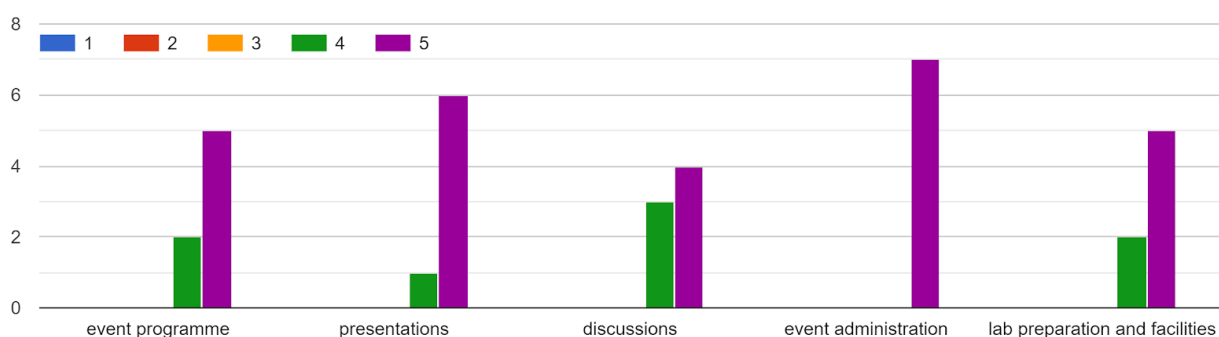


Figure 1. Event rating in terms of organization/management (5 - very good, 1 - weak, 0 - not present)

Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:

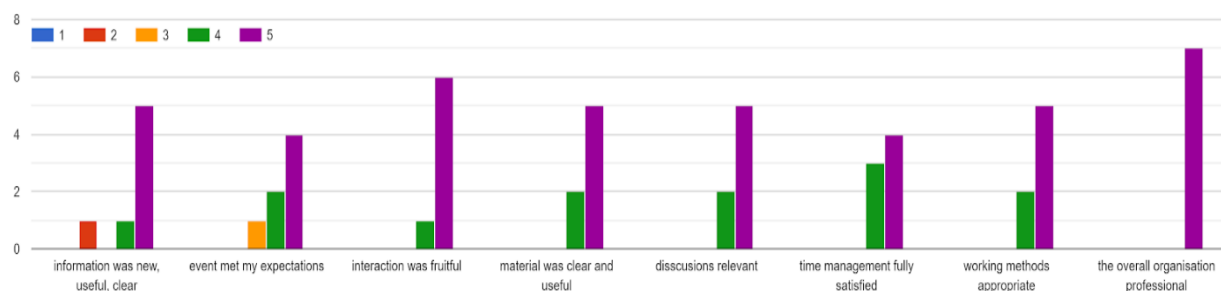


Figure 2. Event rating in terms of outcomes (5 - very good, 1 - weak, 0 - not present)

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Forth Steering Meeting

The forth Steering Meeting was held at SEE University, May 20th 2021. The agenda was sent to all participants on time. Main impressions:

- Well-prepared, in time, all issues were delivered and discussed smoothly
- All Partners should contribute especially by providing feedback on the issues discussed.
- Everything was great
- The event quality was good
- Meeting live - in person - would be even better

Figure 3 and Figure 4 show the overall event rating in terms of organization/management and outcomes:

How satisfied you were with (1 = not satisfied, 5 = very satisfied):

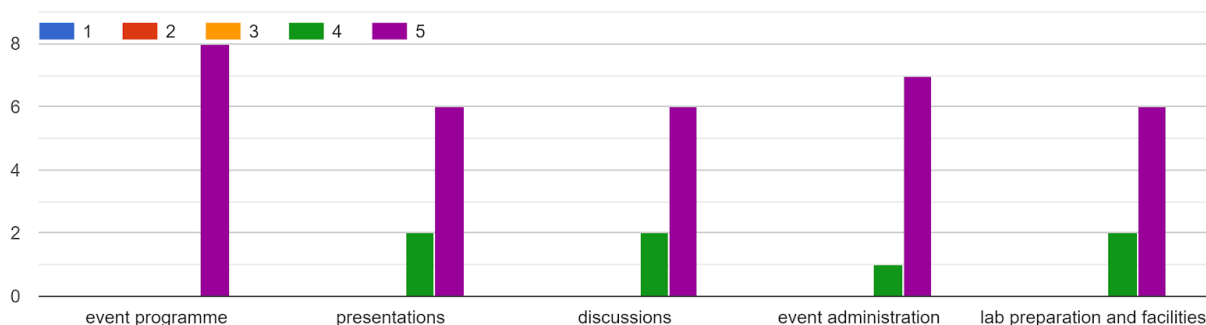


Figure 3. Event rating in terms of organization/management (5 - very good, 1 - weak, 0 - not present)

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Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:

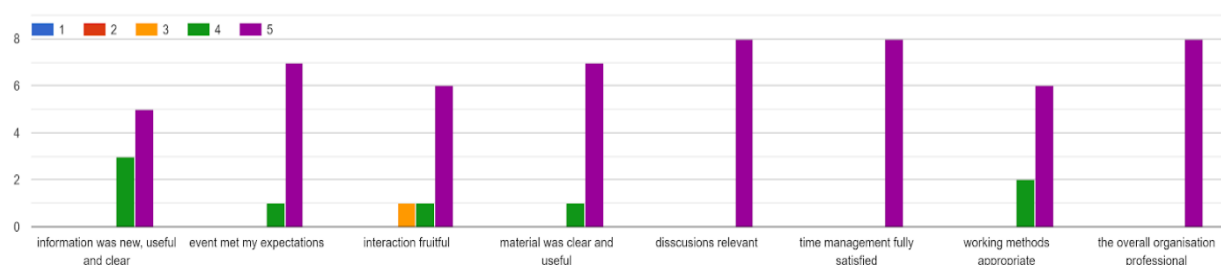


Figure 4. Event rating in terms of outcomes (5 - very good, 1 - weak, 0 - not present)

VTECH Roundtable Meeting

The VTech Roundtable Meeting was held on 21 May 2021, Mother Teresa University, Skopje, North Macedonia. Due to the pandemic situation, some of the partners could not participate.

Some impressions are as follows:

- Needs more frequent meeting between academia and industry
- The round tables like this, should have more PR publicity
- The meeting was great
- Very good!
- Better technical preparation.
- Everything was OK

Figure 5 and Figure 6 show the overall event rating in terms of organization/management and outcomes:

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How satisfied you were with (1 = not satisfied, 5 = very satisfied):

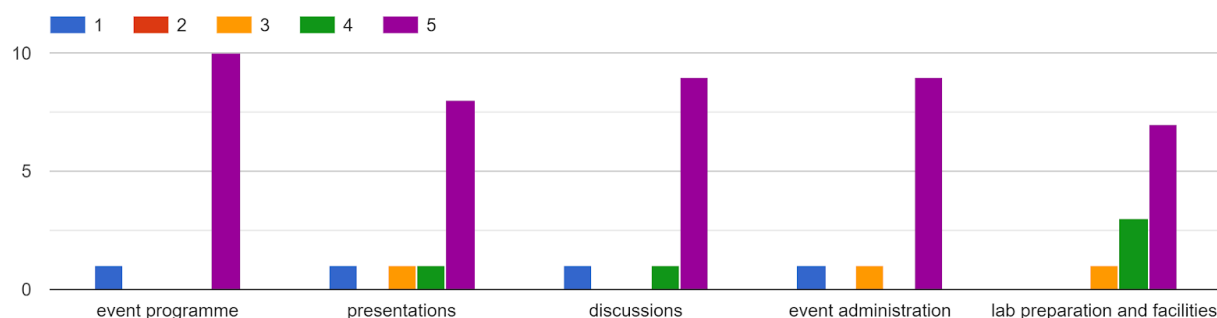


Figure 5. Event rating in terms of organization/management (5 - very good, 1 - weak, 0 - not present)

Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:

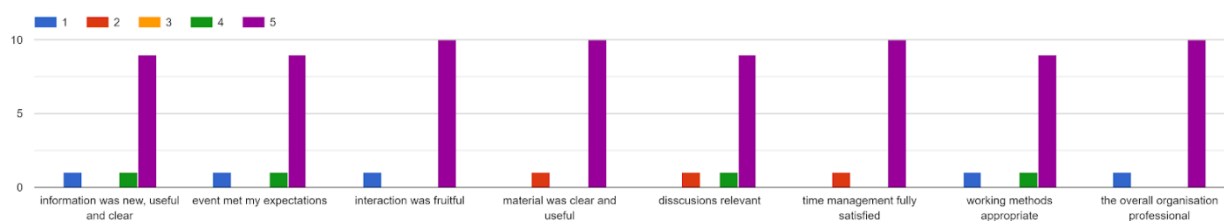


Figure 6. Event rating in terms of outcomes (5 - very good, 1 - weak, 0 - not present)

VTECH Teacher Training

The VTech Teacher Training was held online on 26th May 2021, by University of Ljubljana (UL). The topic was about 'Evaluation of UX in VR and VR sicknesses'.

Some impressions are as follows:

- It was ok
- Everything was well organized
- More practical

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Figure 7 and Figure 8 show the overall event rating in terms of organization/management and outcomes:

How satisfied you were with (1 = not satisfied, 5 = very satisfied):

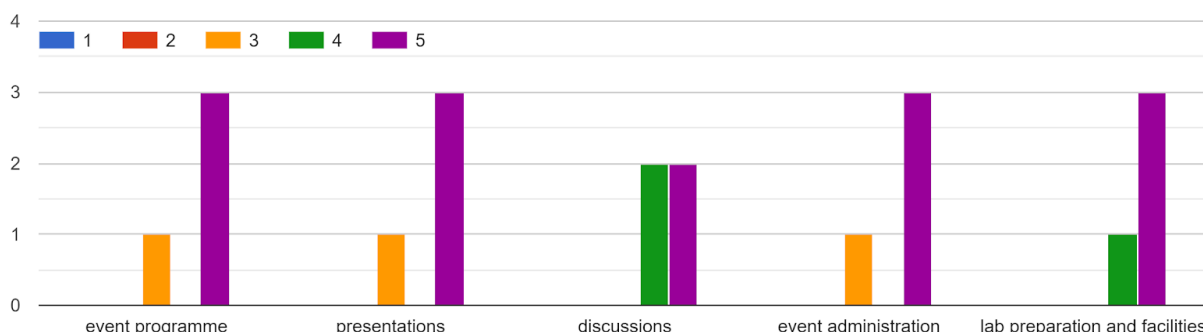


Figure 7. Event rating in terms of organization/management (5 - very good, 1 - weak, 0 - not present)

Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:

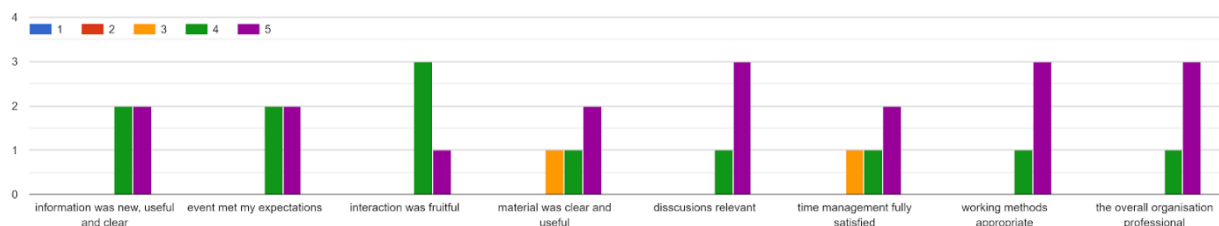


Figure 8. Event rating in terms of outcomes (5 - very good, 1 - weak, 0 - not present)

VTECH Summer School

The VTech Summer School was held from 5th till 9th of July, in UBT, Kosovo. Some impressions are as follows:

- Everything was great, it was a wonderful experience and a good work in group.

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- Would be better to have more exercise or more things to create

Figure 9 and Figure 10 show the overall event rating in terms of organization/management and outcomes:

How satisfied you were with (1 = not satisfied, 5 = very satisfied):

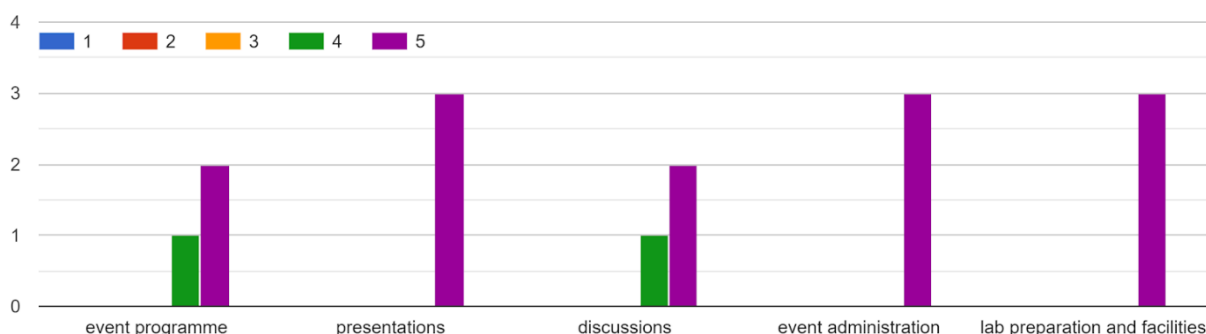


Figure 9. Event rating in terms of organization/management (5 - very good, 1 - weak, 0 - not present)

Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:

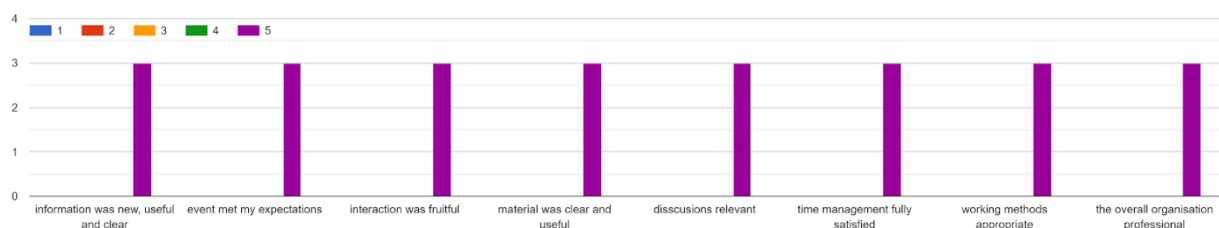


Figure 10. Event rating in terms of outcomes (5 - very good, 1 - weak, 0 - not present)

VTECH VR/AR TRAINING and HACKATON

The VTech VR/AR TRAINING and HACKATON were held on October 2021, by UMT, Skopje, North Macedonia. Some impressions are as follows:

- Everything is good

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- We can add more UNITY practice hours.

Figure 11 and Figure 12 show the overall event rating in terms of organization/management and outcomes:

How satisfied you were with (1 = not satisfied, 5 = very satisfied):

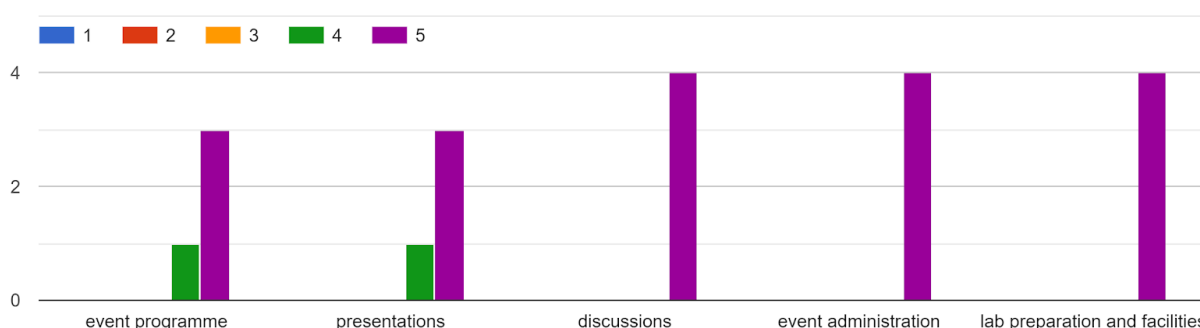


Figure 11. Event rating in terms of organization/management (5 - very good, 1 - weak, 0 - not present)

Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:

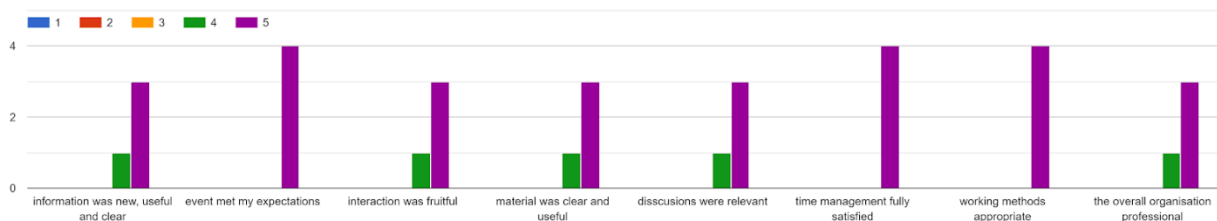


Figure 12. Event rating in terms of outcomes (5 - very good, 1 - weak, 0 - not present)

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VTECH Teacher Training

The VTECH Teacher Training with topic '3D Object Creation for VR through Photogrammetry' was held on November 22-23, 2021, by SEE University, at Epoka University, Albania. Some impressions are as follows:

- There are needed more days for training
- Participants are told in advance what they need to have ready, so as not to lose time installing the software.
- Maybe demonstrating more practical aspects
- It was OK
- Trainings should include practical exercises
- To have more case studies

Figure 13 and Figure 14 show the overall event rating in terms of organization/management and outcomes:

How satisfied you were with (1 = not satisfied, 5 = very satisfied):

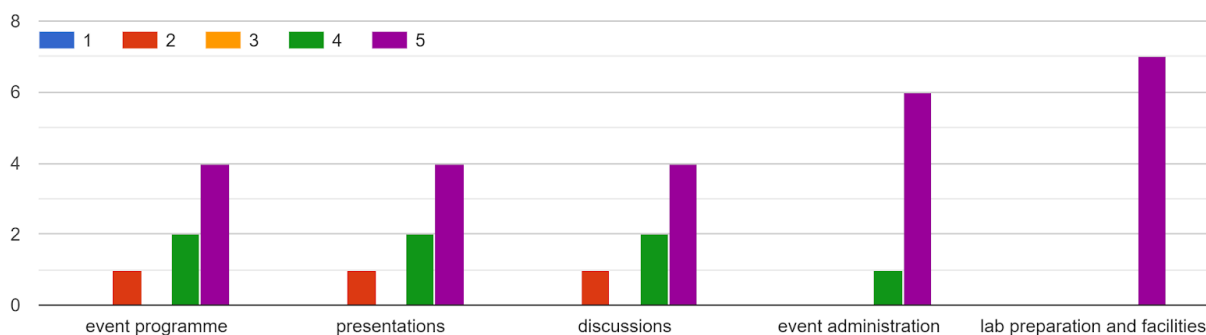


Figure 13. Event rating in terms of organization/management (5 - very good, 1 - weak, 0 - not present)

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Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:

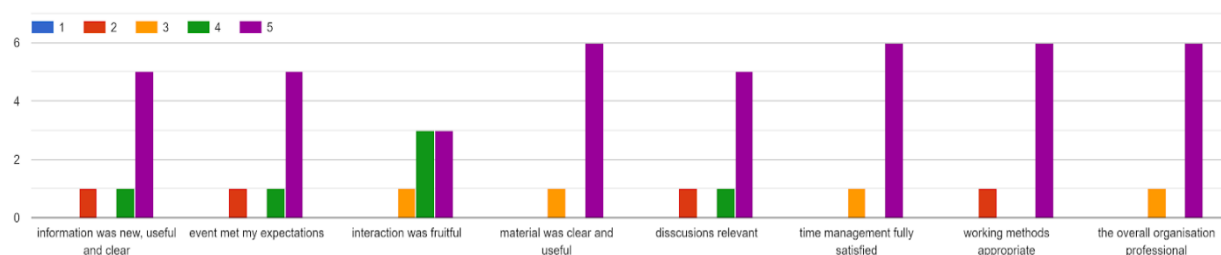


Figure 14. Event rating in terms of outcomes (5 - very good, 1 - weak, 0 - not present)

Document evaluation

The opinions and suggestions regarding overall document quality provided by each partner is as follows:

- The documents have been prepared thoroughly and address all details.
- Well prepared.
- The quality document is completed.
- Overall good

Figure 15 shows the overall quality rating of delivered documents for each WP:

Please rate quality of delivered documents for each WP (5 - very good, 1 - weak, 0 - no documents):

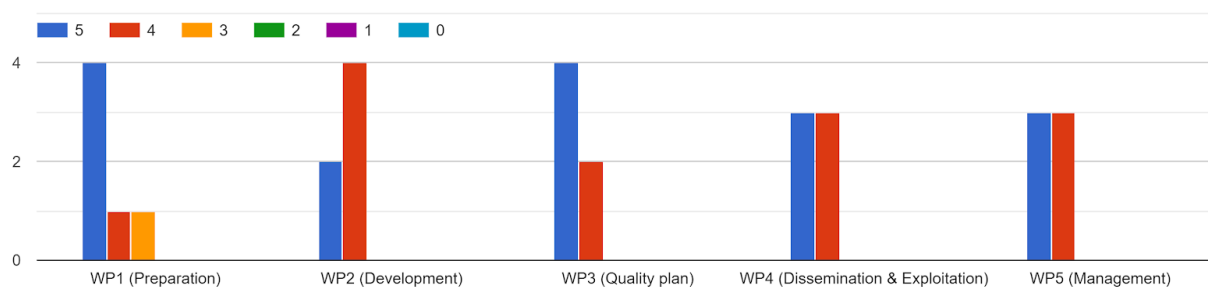


Figure 15. Overall quality rating of delivered documents for each WP (5 - very good, 1 - weak, 0 - not present)

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COVID-19 Impact evaluation

After the first QA Report, the pandemic situation remained with its ups and downs, which again had impact in the overall project realization. For this reason, we continued to evaluate also the impact of COVID-19 for VTech.

These are the most important remarks by partners:

- We believe we have coped with the situation very nicely.
- COVID-19 Pandemic outbreak
- There were some postponed activities, which hopefully will be concluded in the remaining period
- Since the COVID-19 has affected some aspects of the project, I would like to suggest extending the deadlines of WP delivering

Figure 16 shows the overall rating of COVID19 impact for VTech activities:

Please give a rate regarding COVID19 impact for main VTech activities (5 - very high impact, 1 - no impact)

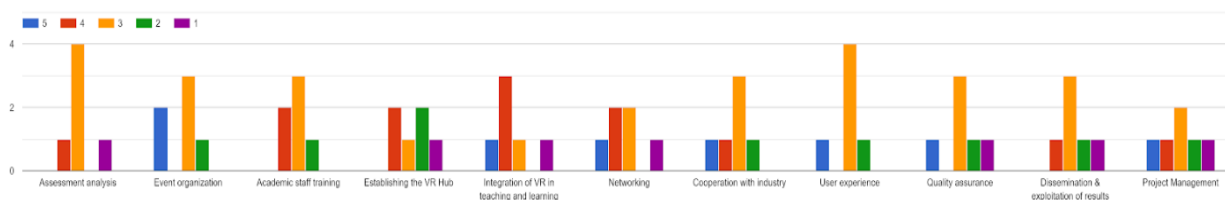


Figure 16. Overall rating of COVID19 impact for VTech activities (5 - very good, 1 - weak, 0 - not present)

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Conclusions

The second year of project implementation several trainings on VR/AR took place. All the foreseen Vtech project activities were completed. Still, due to COVID19, some of them were in online mode, some hybrid and onsite. The trainings included sessions for staff and students as well. It is worth noting that a variety of topics in the field of VR using latest technologies in the field were carried out in the scope of this trainings as well during the summer school and the hackathon. So, although there COVID19 has caused delay in several activities in the first year of implementation, this year project activities have been fully implemented and planned outputs have been achieved.

This report was generated after the second year of the project activity. The Quality Assurance Team prepared the content and approved it at the meeting held in Pristina, on 20-21 December 2022. The report is based on the questionnaire that was shared among the partner institutions' representatives. They have evaluated the meetings, training, documents, and overall project activities. So, it is a form of self-evaluation of each of their tasks, as well as areas for improvement in the activities that they are leading or improvements in activities led by other partners.

The general conclusion for the training remarks is that the participants were looking for more practical examples with hands-on VR technologies so that they get the needed experience in using VR/AR in their courses. In this regard, some of them are foreseeing slight delays in their deliverables due to the delay in the establishment of the VR labs and training.