

Virtual Production: Common Spaces – Ideas in Transit Evaluation



EMERGING MEDIA EXPLORATION

Virtual Production: Common Spaces – Ideas in Transit Evaluation



Grant agreement no.: 2018-1-DE01-KA203-004282
Project Consortium: University Babelsberg KONRAD WOLF (Germany); Tampere University (Finland); Tampere University of Applied Sciences (Finland); University of Lincoln (United Kingdom); University of Central Lancashire (United Kingdom)

Sophie Tummescheit, Film University Babelsberg KONRAD WOLF, Germany

Introduction

In the 5-week course, six international teams drawn from Universities of Finland, the UK and Germany, and with different academic backgrounds, formed groups of 5-7 members to develop a prototype built with the help of the Unreal engine and any real-life capture Technology.

The course was divided into two parts. The first part was a 4-week preparatory online course, for which 1-2 meetings were held each week by an interdisciplinary and international set of 2 mentors. The aim of the preparatory course was to develop an idea, decide on a production method together with a technical advisory team and develop a first prototype.

The second part of the course was originally planned as a one-week attendance phase at the Filmuniversität Babelsberg KONRAD WOLF, but due to Covid-19 safety measures, the students had to work on the final high-fidelity prototype at their university location, or at home. Throughout the whole period, the 5 groups were supported by their 2 mentors and by a technical advisory team.

Two industry partners – RBB, a regional broadcaster from Germany, Babelsberg and YLE, a broadcaster from Finland, Tampere – provided briefing for this course, which could be worked on by the groups.

Mentor Feedback

- **Course Theme:** The theme of the course “Virtual Production: Common Spaces – Ideas in Transit” was received very well by all participants. The EMEX-Partners enjoyed the topic of virtual production.
- **Course Goals:** Besides the specified goal of producing a high-fidelity prototype, the aim of the course for the groups and their members was actually to try out new technologies, which happened successfully in all groups.
For some groups the goal and the interim goals were quite clear, but other groups needed to be reminded of this repeatedly and shown examples.
- **Platforms:** The use of Discord was a huge success. The mentors loved the platform, but some struggled a little bit with the settings and wanted an introduction. A main issue was that posts can be easily missed, if one does not look for them actively.
Some groups struggled with the voice channel and used other platforms for video conferences. In general, there is broad agreement that only one platform should be used, but there was uncertainty about whether Discord is also suitable for publishing and hosting the course materials. The mentors also mentioned that Digicampus, a Moodle platform with most of the learning materials, was ignored by the students. However, it was also offline for several days.
- It was suggested that an Email list should be in place if technologies fail, and that a Virtual Reality meeting room would be a good idea.
- **Remote Collaboration:** The exclusively remote work for production projects didn't seem to negatively impact the students. Students were more resilient than was expected by some mentors. It should be noted that most of the projects were real transnational collaborative projects with participants from three countries.
- **Group collaboration:** There were various statements about communication in the groups. In some cases, group discussion via Discord got better over time, but it

still did not work well in some groups. But overall, students seemed to really bond and to identify with their groups. Some groups showed an imbalance in participation and contributions. The distribution of skills was balanced within the groups but nevertheless there was an imbalance in participation and contributions. Some groups struggled with this and there was a lack of presence of some group members. 6 students dropped out of the course due to personal reasons.

- **Teaching:** The issues in group collaboration make it clear that a greater focus must be placed on team building. It would improve communication and active participation in the course.

- The students often ignored concrete instructions. The presumed reason is that the students either did not understand the instructions in detail or overestimated the required perfection level of the outputs.

It should not be assumed that students instantly absorb all information provided to them. Repetition is clearly necessary. Students also did not accept direct offers of help, such as one-to-one technical assistance and repeated encouragement was necessary. Once help was accepted, it was very much appreciated.

- For the next course, it is suggested to focus more on available technology and its potential at the very beginning, so that the participants can better understand the concepts. There should also be a technical training phase where all participants are taught some basic skills. More content and training on virtual production was asked for. Another suggested measure was to make fixed appointments with the technical advisors, or else that each team have its own technical advisor. The notion that the technical team could be contacted at any time may introduce the problem that students first must overcome an inhibition threshold. Generally mentors reported that students asked for clearer directions.

- **Teaching and Learning Materials:**

Learning materials were diverse and numerous. However, the timing of input is crucial. As a prelude to the intensive week, Om-Studios provided a presentation which the tutors felt should have been given at the beginning of the course, as it gave a very good overview of virtual production methods.

- **Open ideation:** The guided open ideation went well for most of the groups. For some of the groups the scheduling of guided sessions was difficult. In these groups, suggestions were made for asynchronous work on ideas, but this failed. The students simply did not work on the tasks, probably because they did not see the point of them, which is most likely due to the fact that this was not communicated in detail.

The participants were inhibited by the concern that the tasks were not technically achievable given their skill levels, or that the implementation of the idea will depend upon single individuals of the group with more experience. Some mentors would also prefer more creative exchange between students in the ideation phase.

- **Prototyping:** Some teams avoided communicating visually about their idea, even though they were advised to do so. A possible reason for this is that the groups were concerned that their ideas would not be implemented as designed.

- **Briefings:** The briefings of the industry partners were not dealt with by any of the groups, which was interpreted negatively by the mentors. The briefings from the industry partners did not really address the aim of creating a space around the broad theme of "Common Spaces - Ideas in Transit".

- **Time frame:** The time frame, concerning the length of the course, seemed just right in total, but the ideation phase should have been a bit longer. It needs about 3 guided sessions to develop an idea students that want to proceed with. Two weeks is too short a timeframe to schedule such meetings and it also takes more than two weeks for the groups to become familiar with each other and with the task in hand.

The general timing of the course was not optimal. Even though the timing of the course was determined by the semester schedules of the partner universities and the general availability of the tutors, some of the tutors had difficulties being present at all the events. There were also time-related coordination problems among the students due to very different and very busy schedules.

- **Organisational matters:** All teaching participants agree that a mentoring concept with mentors of different origins and abilities is very beneficial. The course attracted enough students from all countries, hence the course theme, the course description and the general setup of the course can be characterised as attractive for students with different study backgrounds. There was individual feedback that it is necessary to get to know topics and tools earlier in order to be able to prepare better. Also, individual mentors wished for a more international group. But it should be noted that, due to dropouts, some groups started out as very multinational and became less so during the course. The cooperation of the mentor pairs was different depending on the group, but some indicated that it is absolutely necessary for pairs to communicate before each tutor session, even if it is only by email.
- **Results:** Despite all difficulties, the results were very impressive, and this assessment is shared by all the mentors. Most mentors got the impression during the final presentation that the groups would have liked to go further and that the goals could be set higher for the next course.
- **Technical Issues:** For some parties, a low bandwidth internet connection caused problems. Requirements for computer capacities should also be known in advance so that appropriate computers can be borrowed in case of need. There were other technical problems, but these were not specified.
- **Follow-up on the course:** It was suggested that activities should not stop abruptly after the intensive week. The teaching team feels that the students would have liked to continue the exchange. But at the same time, it is possible, and for some groups even very likely, that this happened outside the official communication channels and was therefore not visible to the tutors.
- **Corona-Pandemic / Sociability:** All the partners were a little disappointed that the initial plans to meet each other and having an Onsite-Course were not realised.

The live streaming of the production in the Volucap studio was definitely perceived as positive but, according to the mentors, it would have been desirable if some other form of interaction had also been made possible.

Student Survey

- The student survey consists of 21 questions, including 3 multiple choice questions (MC1-3), of which one allowed multiple answers, 14 scale questions (MC1-14) and 5 open questions, allowing free text (FT1-5).
- The Scale questions with a range from 1 to 5 served to evaluate the course goal, the course organisation, and learning success from the students' perspective.
- Further 5 open questions were formulated to acquire details about good practices and challenges during the course.
- 14 of the 27 participants filled out the survey.
- None of the questions were obligatory.

Question Abbr.	Question	Distribution in %

MC-1	Where is your university?	Finland 21,4% Germany 50,0 % UK 28,6%
MC-2	What is your study subject?	Cinematography: – Communication Sciences: – Creative Technologies: – Film Animation: 7,1% Film- and TV Production: 50% Game Studies: – Human-Technology Interaction: 14,3% Media production (Digital Media): 21,4% Music production: 7,1%

Question Abbr.	Labels	Question	Median	σ
SC-1	strongly agree = 5	I was comfortable with the pace and timing of the course.	3	3,3
SC-2	strongly agree = 5	The course goals and objectives were clear to me.	3	2,9
SC-3	strongly agree = 5	I always knew what was expected from me and what to do next.	3	2,5
SC-4	too wide = 5	I found the thematic scope of the course:	3	3,4
SC-5	strongly agree = 5	I have learned about the production perspective (e.g., workflows, technologies).	4	3,8
SC-6	strongly agree = 5	I have learned about the user experience perspective (e.g., perception, usage, design).	3	3,1
SC-7	strongly agree = 5	I have learned about the innovation potential of virtual production and related technologies.	4	4,0
SC-8	strongly agree = 5	I have learned about virtual production might have an impact on individuals and society in general.	4	3,9
SC-9	strongly agree = 5	I have learned about intercultural collaboration.	4	3,6
SC-10	strongly agree = 5	I have learned about online-based ideation and creation.	4	3,9
SC-11	strongly agree = 5	I have learned about prototyping.	4	3,9
SC-12	very likely = 5	I feel confident to start a VR or Virtual Production project on my own now.	3	3,1

SC-13	very much = 5	I would like to stay in touch with members of my team for future projects.	3,5	3,5
SC-14	very much = 5	I would like to stay in touch with members of my team for reasons other than future projects (networking, social meetings, etc).	3	3,2

Question Abbr.	Question	Distribution in %	n	%
FT_1	Which course materials, activities or events helped you most?	<p>Tutor Sessions</p> <p>Not enough info Material, or not organized</p> <p>Lectures/Lecturer</p> <p>No answer</p> <p>Production in the Volucap Studio</p> <p>Observation of other groups</p> <p>Discord</p> <p>Prototyping</p> <p>n=19</p>	4	21,05%
FT_2a	How did you communicate in your team, both technically and practically?	<p>Discord</p> <p>Zoom</p> <p>WhatsApp</p> <p>No answer</p> <p>Telegram</p> <p>n=23</p>	11	47,83%
FT_2b	How did you communicate in your team, both technically and practically ?	<p>No answer</p> <p>A lot of communication / texting</p> <p>Not everyone involved</p> <p>Weekly</p> <p>n=14</p>	9	64,29%
FT_3	What were the best experiences and learnings during the course?	<p>Getting to know new software and gaining skills</p> <p>PBL (project-based learning)</p> <p>No answer</p> <p>Functioning group work during the intensive week</p> <p>3D meeting environment</p> <p>Communication</p> <p>Work with innovative technologies</p> <p>Time management</p> <p>International Teamwork</p> <p>n=17</p>	5	29,41%
FT_4	What challenges and problems did you encounter during the course?	<p>Different time schedules, time zones</p> <p>Inactive members/unevenly distributed tasks</p> <p>Lacking tech skills (theoretically and practically)</p> <p>Unclear or bad communication</p> <p>Unclear goal</p> <p>Top-Down Tutoring</p> <p>Too many platforms</p> <p>Open ideation and decision process</p>	6	30,00%

		No step-by-step instructions n=20	1	5,00%
MC_3	How would you like to follow up on this course?	A) I'd like to further pursue the project idea(s) we had B) I'd like to continue working with my team C) I'd like to continue in a different team constellation D) I'd like to see further lectures E) I'd like to have continued project tutoring F) No thanks, I am fine n=32	8	25,00%
FT_5	Anything else you want to tell us?	Critical Feedback or Suggestions for improvement mainly positive Feedback n=9	7 2	77,78% 22,78%

All the survey results are shown in the table above. All free-text questions were categorised. But since opinions on the course differed strongly, there are many individual entries. The extremes and most notable results are described below:

- The average of the scale questions shows that all results except 2 are above average (SC1-14). But as in the previous course, not all participants understood the course objective and knew which next steps were expected from them (SC3, SC4).
- Nevertheless, the median for all 14 scale questions was 3 for 7 answers, and above 3 for the remaining 7 scale questions. This means most of the students learned about the production perspective (e.g., workflows and technologies) (SC-5), learned about the innovation potential of virtual production and related technologies. (SC-7), and learned how virtual production might have an impact on individuals and society in general (SC-8). They have also learned about intercultural collaboration, online-based ideation and creation and prototyping. A lot of participants would like to stay in touch with the members of their team.
- If one compares the median answers for the 10 questions asked identically in the spring course (SC1-10), one can see that they have remained largely the same. However, students felt more uncomfortable with the pace and timing in the autumn course (median=3) than in the spring course (median=4). This is not surprising as the communicated goals, although over a longer period, were much higher. The median for the statement: "The course goals and objectives were clear to me" has improved. While it was 2.5 for the spring course, it is now 3.
- Tutor sessions and lectures are named among the most helpful activities and events during the course, but teaching materials were felt to be too few or not sufficiently structured. Production in the Volucap Studio, prototyping and the possibility of observing other groups (FT-1) were also described as helpful.
- Many students did not give answers on how they communicated practically (n=9). Those who responded (n=5) said that there was a lot of communication and a lot of texting and that not all the group members participated (FT-2a).

- The official communication platform was Discord and accordingly this platform was mentioned most often. Nevertheless, communication also took place via WhatsApp and Telegram, which makes it clear that the students often used a second channel for communication that was not visible to the mentors. Although video meetings were possible via Discord, Zoom was occasionally used as a platform. This is probably because this platform is known to most students and mentors (FT-2b).
- Getting to know new software and skills was one of the best experiences and learnings during the course, as was the project-based learning approach itself, namely the “do-it-yourself mentality”. Individually, many of the answers regarding the best experiences differ greatly. Mentioned positively were: functioning group work at the end of the course, communication, the work with innovative technologies, learning about time management and international teamwork (FT-3).
- Time was seen as the biggest challenge in the course. This applies to the availability of time, different schedules and different time zones. Intercultural teamwork also caused a problem, since some group members were perceived as too passive or even inactive. On the other hand, there was also an English team member who felt excluded in a predominantly German team (FT-4).
- A majority of the students that filled in the survey, would like to further pursue their project idea(s). Half of them would like to see further lectures. 6 would like to continue with a different team, 4 would like to continue in the same team. 3 answered: “No, thanks I am fine.” (MC-3).
- The final question: “Anything else you want to tell us?” was only answered by 4 students. It was mentioned twice that the course should begin with presentations and explanations of the available techniques and that clearer course goals are needed (FT-5).

Overall, the course can be considered successful, as none of the ratings for the scale statements were negative. 11 of the 14 responding participants would like to continue the course in some way.

Insights and Conclusions

- When it comes to definition working and non-functioning teaching practices in international online courses on emerging media, it must be noted that no clear and simple strategies for action can be defined. In each of the courses so far, the tasks have differed and so have the problems. But still there are some constants.
- To allow sufficient creative freedom – which is necessary to find topics that excite all participants – the tasks are formulated relatively broadly. This has the disadvantage that the (technical) solutions can be diverse and that therefore suitable teaching materials are not produced for every possible solution in advance. For the reasons mentioned, teaching tends to be ad hoc, but not all mentors can be expected to have expert knowledge in all areas. This is precisely why a technical advisory team was introduced for this course - however this offer was often not used to the full extent possible by the participants, and sometimes not at all.
- The groups often hesitated to ask for help although attention was drawn to this possibility several times. Once the offer of help was established, students gratefully accepted it. For future courses with a high demand for technical support, it would be helpful to set up mandatory consulting hours.
- The larger the group of internationally collaborating universities, the more difficult it is to determine a time for joint courses that suits all teachers and students. Consequently, there will always be a conflict between a desired maximum

diversity among teachers and students and an implementation that allows all teachers and students enough time for satisfactory realisations.

One way to ease these difficulties would be to make these courses a fixed part of the curriculum in all partner universities, or to offer these courses in a uniform way for all as an extracurricular option. Firstly, it is advantageous if the motivation and importance of the course of the participants does not vary too much and secondly, it is beneficial for all participants if the time that can be spent on the course does not vary so much from the time available to each student of every group.

- Most of the group members wanted to continue with their project in one way or another, should be a possibility for expansion. The aim is to offer opportunities to present their ideas to a broad public. Various contests and competitions should be offered to the members of the course. Above all, there should be an additional event at the end of the course that allows participants to express their further goals and so that mentors can set out possibilities for further action.
- As few communication channels as possible should be used -in the best case, only one. The students seem to be overwhelmed due to their different courses and the various channels used. Discord allows you to “pin” important messages, so that they do not get lost. Theoretically, Discord could be used as the sole platform if individual pieces of information are very well structured. Practical application should be tested in the follow-up course.
- Normally, international online creative work in groups is a welcome change in the student routine of the participants. According to the students, however, the number of online workshops and project-based learning courses increased significantly during Covid-19, and some felt that this was too much, which may have led to a decrease in motivation in some cases.