RELEVANT ASSESSMENT AND PEDAGOGIES FOR INCLUSIVE DIGITAL EDUCATION

RAPIDE

RAPIDE MOOC

November, 2022

Title	RAPIDE eCOURSE (MOOC with 4 modules) TRAINING DELIVERY
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Abstract:	Overview of the work performed and the results achieved within the RAPIDE eCOURSE which was prepared in a form of MOOC with 4 modules. The results planned in the application are broadened and a complex MOOC was prepared. As the concrete legacy, this partnership created the self-paced eCourse.
Key words	innovative pedagogies, assessment, learning analytics, impact, e-course

EXECUTIVE SUMMARY

This document includes the overview of the work performed and the results achieved within the RAPIDE extra training activities and workshops for teachers. The training material and sources have been organized in four chapters related to the RAPIDE project's intellectual outputs including innovating teaching (flipped classroom and project-based learning), innovating assessment, innovating support (learning analytics) and the impact of the innovative pedagogies on the strategic goals of a higher education institution. This document includes experiences and summaries of the performed piloting in the period June, 2022 - November, 2022.

CONTENTS

1. INTRODUCTION

The RAPIDE e-course "Let's get flipped!" is an excellent opportunity for your professional development, collaboration with international experts and peers, as well as a chance for unique co-creational experiences. The RAPIDE e-course is research-based short online modules that include theoretical introductions to four major topics, best-practice examples and hands-on activities, related to innovative pedagogies and assessment, learning analytics and impact of innovative pedagogies.
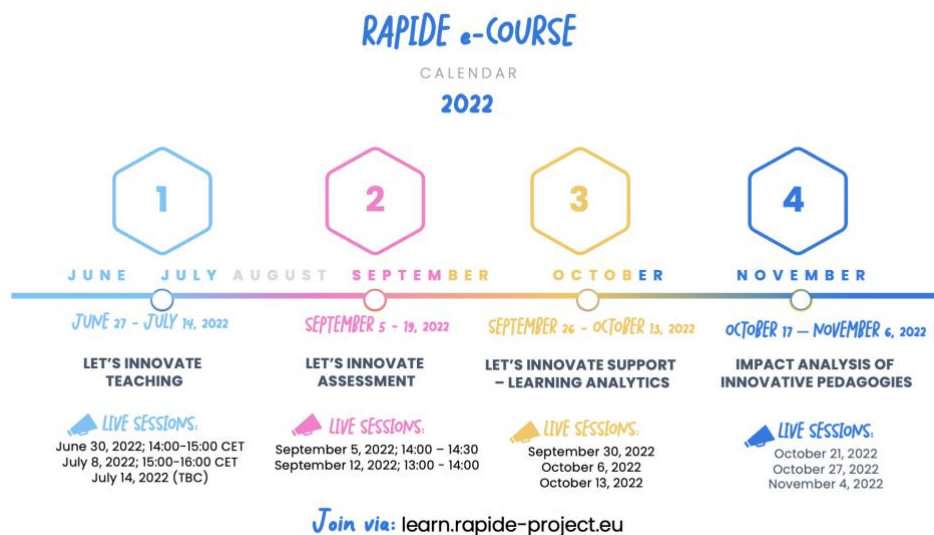
The e-course will be delivered through four modules, online, within Moodle, mainly asynchronously with several live sessions. Although the modules are designed to be attended in sequence, the modules are developed to allow you to to skip respective activities if you have already developed a strong expertise in a respective module. However, it is strongly recommended that all participants take the course in its entirety since the project is based on co-creation and the engagement of experienced participants will be very appreciated since all participants will be invited to give feedback to their peers, experts and workshop creators. Completion of each module will be awarded by 1 ECTS credit (4 ECTS credits for the entire course).
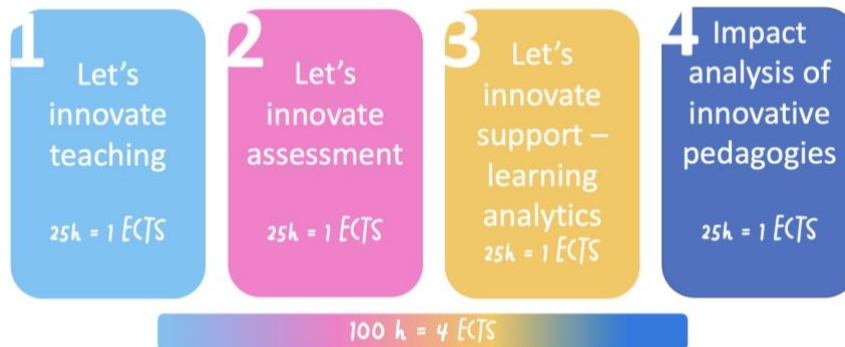
The modules will be delivered according to the following timeline:
1. Module 1 Let's Innovate Teaching: Innovative Pedagogies: 27 June – 10 July 2022
2. Module 2 Let's innovate Assessment!: 5 September – 19 September 2022
3. Module 3 Learning Analytics: 26 September – 13 October 2022
4. Module 4 Impact: 17 October – 6 November 2022

RAPIDE e-COURSE

CALENDAR

2022

1	2	3	4
JUNE JULY AUGUST	SEPTEMBER	OCTOBER	NOVEMBER

JUNE 27 - JULY 14, 2022

LET'S INNOVATE TEACHING

LIVE SESSIONS:
June 30, 2022; 14:00–15:00 CET
July 8, 2022; 15:00-16:00 CET
July 14, 2022 (TBC)

SEPTEMBER 5 - 19, 2022

LET'S INNOVATE ASSESSMENT

LIVE SESSIONS:
September 5, 2022; 14:00 – 14:30
September 12, 2022; 13:00 – 14:00

SEPTEMBER 26 - OCTOBER 13, 2022

LET'S INNOVATE SUPPORT – LEARNING ANALYTICS

LIVE SESSIONS:
September 30, 2022
October 6, 2022
October 13, 2022

OCTOBER 17 – NOVEMBER 6, 2022

IMPACT ANALYSIS OF INNOVATIVE PEDAGOGIES

LIVE SESSIONS:
October 21, 2022
October 27, 2022
November 4, 2022

Join via: learn.rapide-project.eu

All the materials available within this e-course have been prepared in line with the Creative Commons licence (CC BY NC SA).
To learn more about the project, visit the official project website: https://rapide-project.eu/. We are looking forward to working and learning together!

Video: about the MOOC:

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2. RECRUITMENT

The recruitment of the participants was performed centrally from the RAPIDE Project Office at FOI with cooperation of all partners.

The initial recruitment was performed in June, 2022, inviting potential candidates from all partner institutions to join all 4 Modules. Additional recruitment calls were issued before each Module. The recruitment pack included personalized invitation delivered by email and promo booklet about the RAPIDE eCOURSE available online: https://rapide-project.eu/sites/default/files/FlipBooks/eCOURSE/index.html

Additional effort has been made by partners to spread the info about the course among their colleagues via institutional channels and personal contacts.

The recruitment actions resulted with the following results:
1/number and profile of the participants
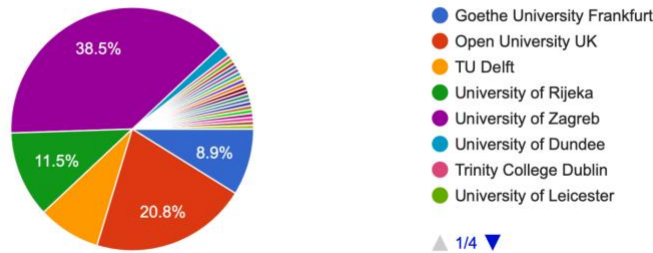
2/ List of participants per Module

3/ Participant profiles - according to previous experience
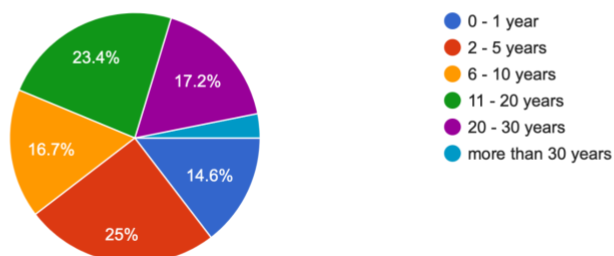
3. MODULE 1 - LET'S INNOVATE TEACHING

3.1 GOALS

In this module participants have the opportunity to innovate their current teaching by introducing innovative pedagogies:

1. Implement flipped classroom approach in an online environment, encourage and enable all students to be active, to inquire and interact with the teachers, peers and course materials;
2. Integrate work-based learning in an online environment in order to enable the enhancement of learning outcomes.

The goals of "Let's innovate teaching" are dual:

1. To provide educators with hands-on training on using two innovative teaching approaches (i.e., flipped classroom (FC) and blended/online work based learning (WBL)) in an online environment and to be able to transfer the acquired knowledge to peers at their institutions within local workshops;
2. To get feedback from educators on the content, design, and transferability of training performance.

Workload - Module 1 takes about 25 hours to complete (1 ECTS) depending on experience and expertise. It is estimated that participants should spend 1-3 hours in the Prepare phase, 5-12 hours in the Engage phase, and 10 in the (optional) Extend phase.

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3.2 LEARNING OUTCOMES AND STRUCTURES

Learning outcomes of "Let's innovate teaching" are related to:

- Understanding the concept of innovative teaching approaches that stimulate students' engagement and deeper approaches to learning
- Analyzing different academic subjects and their implementation in online environment
- Designing and (potentially) implementing FC and WBL in an online environment taking into account study and subject field, student background and needs.

The modules follows the 3-step structure inspired by flipped classroom approach:

3.2.1 INTRODUCTION

In the introductory part the participant are provided with:

- introduction to the course
- introduction to the module
- module schedule
- Q&A section
- news and notification section
- initial survey that is anonymous designed to collect the data as the basis for adapting the course to participants' needs.
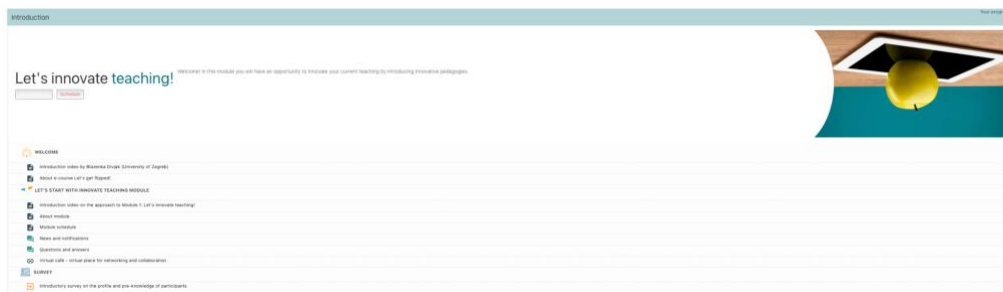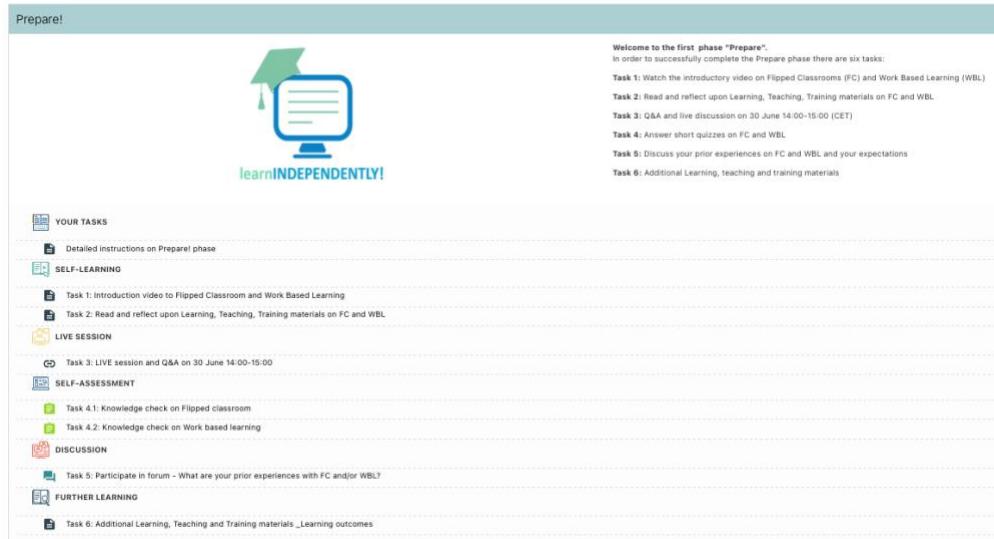

3.2.2 PREPARE

In the "Prepare phase" the participants work mostly individually. It is estimated the participants spend 1-3 hours in the Prepare phase depending on previous expertise and experience. The Prepare phase there includes the following six tasks:

1) Introductory video on Flipped Classrooms (FC) and Work Based Learning (WBL);

2) Learning, Teaching, Training materials on FC and WBL; Participants explore detailed descriptions of recent FC and WBL applications during and after the pandemic. Based upon interests and expertise, participants are encouraged to select one article from the respective learning materials and skim-read the article and how it has used FC and WBL. Afterwards, participants reflect on whether (or not) some of these ideas might also be appropriate for their context.

3) Q&A and live discussion - on 30 June, 2022 from 1400-1500 (CET) online Zoom session was hosted. Participants have the opportunity to join a synchronous Q&A and live discussion with colleagues to introduce their experiences with other colleagues and discuss if some of the applications during the pandemic can be applied to their context. Session will be recorded in case you cannot attend.

4) Short quiz on FC and WBL; In terms of the short quiz, there are 4 questions each on FC and WBL based upon the Learning, Teaching, Training materials on FC and WBL.

5) Discussion on prior experiences on FC and WBL and expectations; participants are encouraged to share their own

experiences with FC and WBL in the discussion forum as we will continue this activity in the Engage! phase.
6) Additional Learning, teaching and training materials. Participants are provided with further reading materials

3.2.3 ENGAGE

In the Engage! phase participants build on their acquired knowledge in the Prepare! phase, work in smaller groups, and also engage with other participants. They spend around 5-12 hours in the Engage phase.
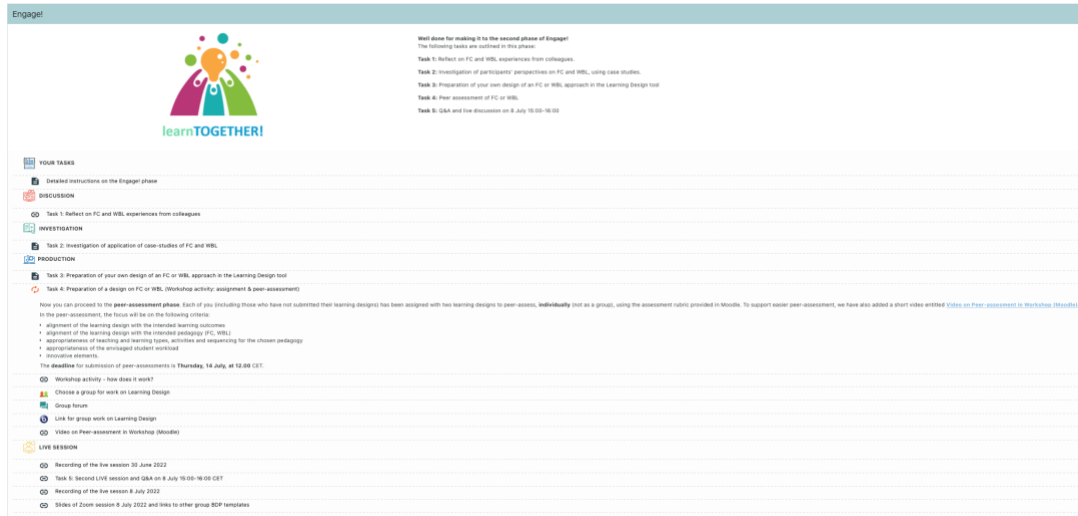The following activities are outlined in this phase:
Task 1: Participants reflect on FC and WBL experiences from colleagues; Once they have had the opportunity to discuss via the forum and first live session the experiences with other colleagues,
Task 2: Investigation of participants' perspectives on FC and WBL, using case studies; Participants review several real case studies by the university partners at the RAPIDE project.
Task 3: Preparation of own design of an FC or WBL approach in the Learning Design tool; Participants have the opportunity to learn how to use the Balanced Design Planning tool, and include their learning design template to create their own FC or WBL learning experience in groups.
Task 4: Peer assessment of FC or WBL; participants review among other peer colleagues the work done by other colleagues providing constructive feedback and learning from others' learning designs.
Task 5: Q&A and live discussion on 8 July; participants join a synchronous Q&A and live discussion with invited experts and colleagues to discuss designs.

3.2.4 EXTEND

In order to successfully perform the Extend! phase the following activities were planned:
1. Participants further read prepared papers: "Flipped Classrooms in Higher Education during the COVID-19 Pandemic: Findings and Future Research Recommendations" and "Online work-based and work-integrated learning: a systematic literature review
2. Participants upgrade their learning designs based on peer-assessment
3. Participants reflect on the potential benefits and risks of FC and WBL
4. Participants evaluate the module and the BDP tool
5. Participants take part in the final live session on 14 July.

3.3 PILOTING RESULTS

Survey:
Participants were invited to share their experiences of the Let's innovate Teaching! module and help our project evaluation by completing a survey. The survey took approximately 5-8 minutes to answer

and all feedback was anonymous. 58 participants submitted their feedback on 31 questions with very positive results and constructive feedback. The geographical location of the participants is shown in the figure below.

Participant's country of employment (N = 58)

- Croatia
- Germany
- The Netherlands
- The United Kingdom
- Other EU country
- Other non-EU country

A total of 27 closed questions were asked and 4 open questions. The answers to the first three of these open questions, 1) what element of the e-module did you like most, 2) what element of the e-module did you like the least, and 3) what would you suggest we change or improve for the next implementation of this module, will be discussed alongside the closed questions. The last open question on how the module will affect the participants' teaching practice will be discussed separately.

When asked about their experience in the course, participants were overwhelmingly positive as can be seen from the figure below. Many indicated they really enjoyed working with others and that they learned a lot from this course. 53 out of 58 (91%) were overall positive about participating in the course.

Participants' experiences in the course (n = 58)

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree
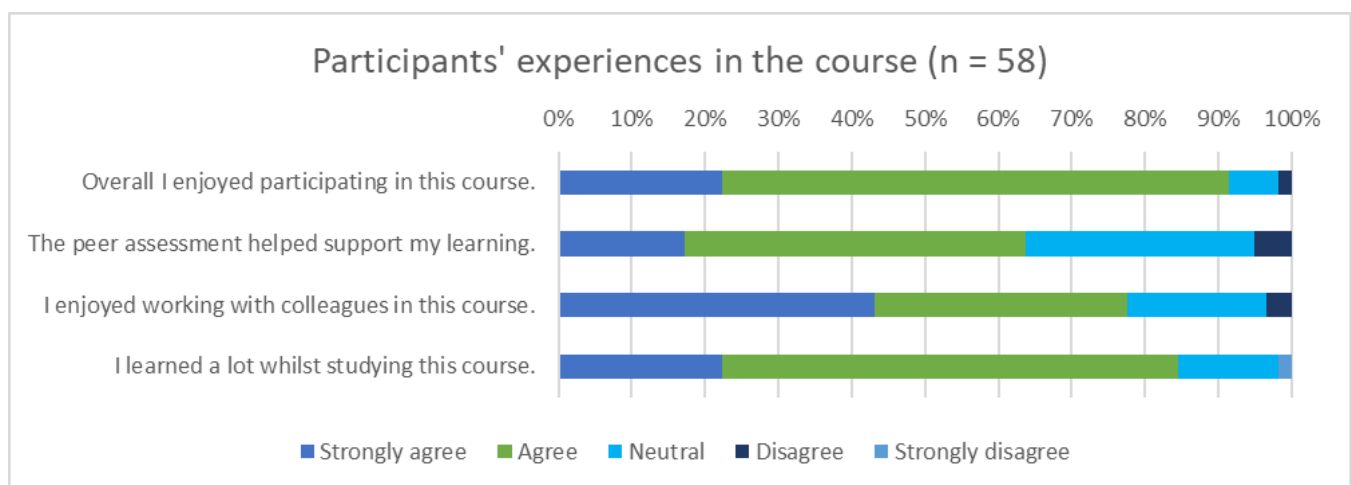
Also the interaction levels in the course with the moderators and group members were high. When asked about their opinion of the offerings within the course, participants were again very positive as can be seen from the figure below, although a small minority were unhappy with the collaboration tools to work with group members, the online ZOOM sessions and the Workshop Tool in Moodle. Also,

from the open questions, it appeared it was not always straightforward for all participants how to implement the Peer Assessment design in a clear way in the BDP tool.

Participants' experiences in the course (n = 58)
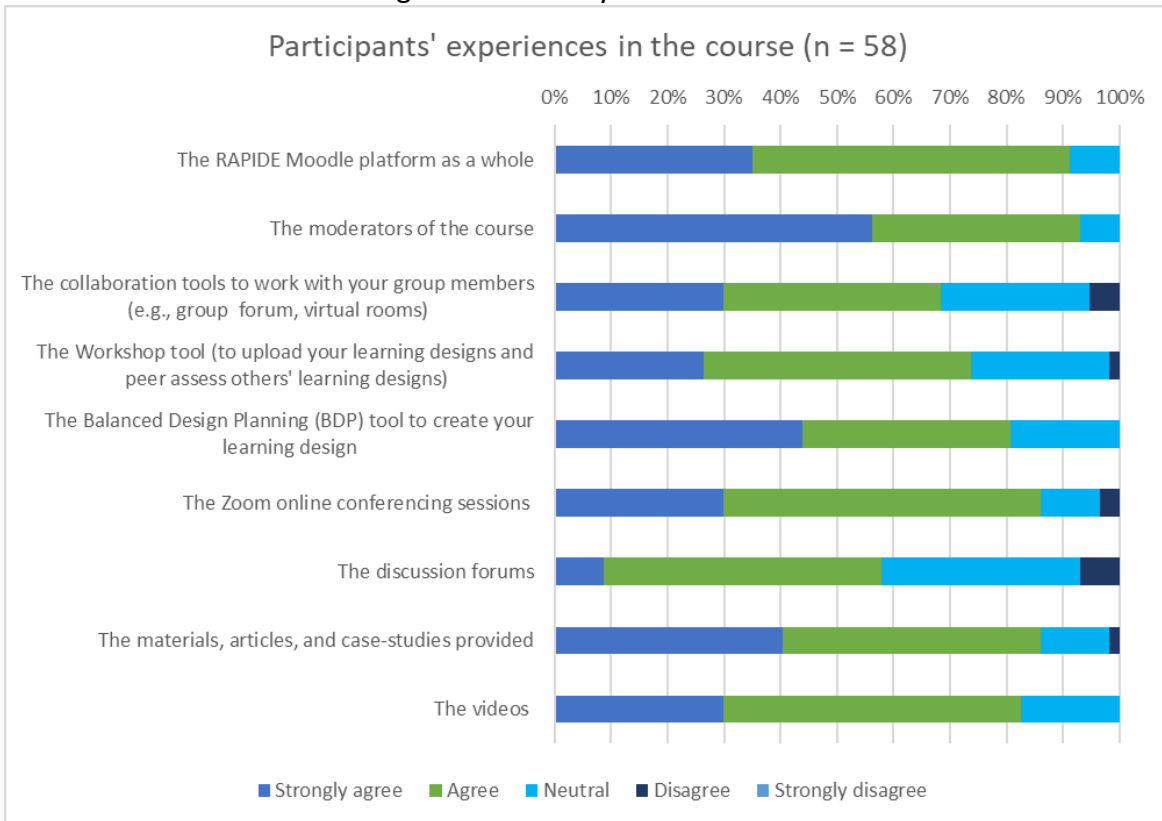
Participants in Module 1 were also asked about their opinion of the use of the BDP tool in the course. The outcomes are listed below. Overall the feedback is again positive although a small minority does indicate to have problems with navigating the BDP tool. This is supported by some of the comments in the open questions in the course.

Participants' experiences in the course (n = 58)
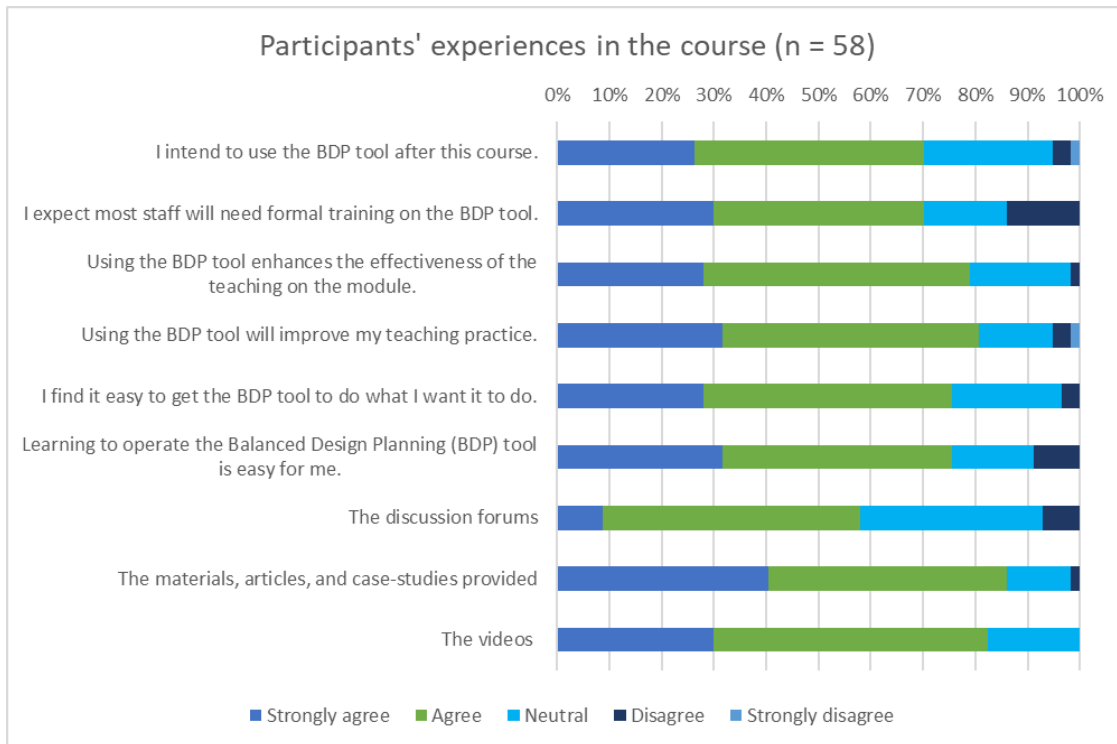
The qualitative comments provided further insights in the lived experiences from participants. For example, C5 indicated "The very structure of the e-course, different types of activities (tests, workshop, work in groups, space for virtual work and group discussion, live sessions, BDP tool) and how they were carried out and how this contributed to the dynamics of work on the tasks and my motivation." This was echoed by C22 who, like several colleagues, enjoyed the flexibility of the course and the opportunities to engage with colleagues: "What I liked the most was the relaxed atmosphere and the flexibility in allocating time to create all the e-courses; planned activities. Additionally, great praise for the ability to communicate very quickly with the organisers and other participants involved in this e-course."

At the same time, there were mixed perspectives in terms of the flexibility and assessment deadlines. As both e-courses were relatively short but intensive (i.e., 3 weeks) this was not necessarily appreciated by all. For example, several educators found that the flexibility of the e-course was at times difficult, in particular when these activities had to be combined with a busy work life. For example, C24 indicated "I don't like fixed deadlines for assignment and teamwork, as well as live sessions, but it's good that they are optional". U9 indicated "I think it needs more time as all people are working during weekdays and many may be in different countries. This makes it a bit harder to coordinate everyone and results in some members not being able to work with the team, and incomplete work within the time given."

At the same time several educators indicated that they enjoyed working with colleagues, such as C12: "Working with my colleagues on a new course, being creative, and learning how to use a tool to support our task". This was supported by G10 who "liked working with the provided materials individually, but I also really enjoyed working in my group."

In terms of the BDP tool that was used to develop a joined group learning design seven Croatian educators (e.g., C8) indicated that the BDP tool was the most useful element of the e-course, while similarly G14, U3 and U9 found the BDP one of the most useful elements of the e-course. For example,

U9 indicated "The BDP tool was new to me and I enjoyed being able to have a more visual representation of my plan. It helps me make sure I am keeping the activities and goals balanced and I loved how easy it is to edit the project there." Four Croatian educators (i.e., C4, C6, C20) specifically indicated that they would use the BDP tool in their next teaching practice, while none of the German or UK educators specifically mentioned that they would use the BDP tool.

Finally, as indicated in the next two figures there was on average a substantial increase in knowledge in flipped classrooms, from 2.81 (SD = 0.90) to 3.82 (SD = 0.82), which according to a paired t-test was a significant increase (t = 10.151, p < .01, Cohen d = .80). Similarly there was a substantial increase in knowledge in work-based learning, from 2.81 (SD = 0.90) to 3.63 (SD = 0.80), which according to a paired t-test was a significant increase (t = 8.415, p < .01, Cohen d = .79). In other words, there was a significant increase in knowledge in both FCs and WBL related to the e-course.
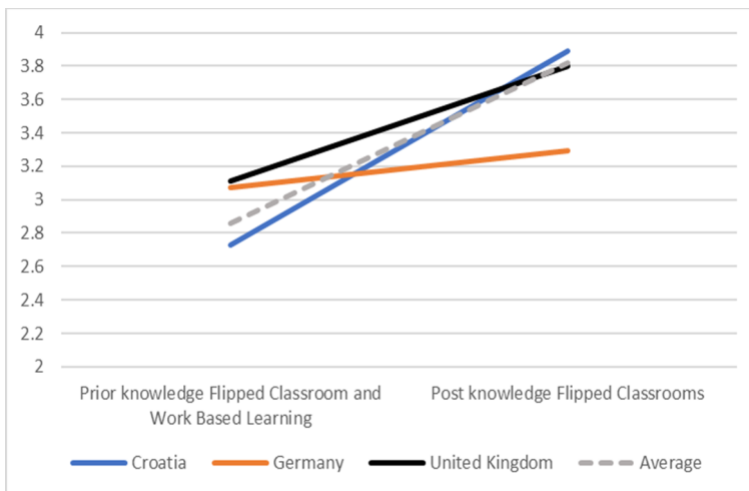

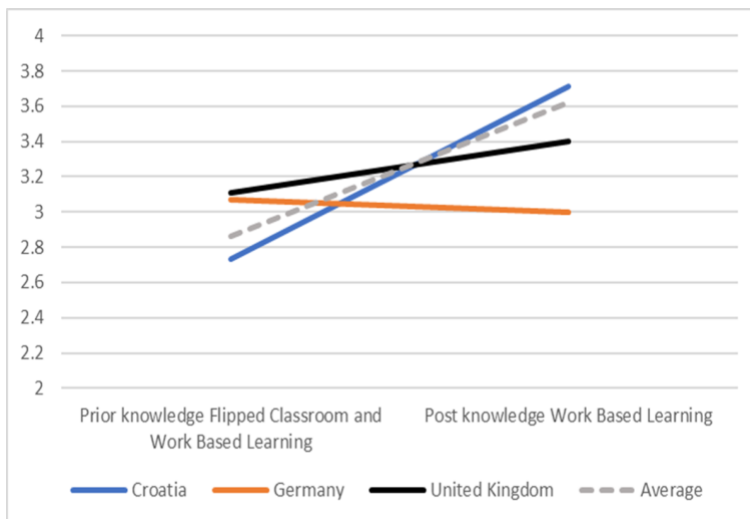Figure (Pre and Post) Knowledge of flipped classrooms (1-5)

Figure (Pre and Post) Knowledge of work-based learning (1-5)

What will participants change in their teaching practice?
An open question was also asked on the ways participants would adapt or change your practice as a result of studying this course? A total of 160 answers were received with many indicating they are considering changing the way they assess in their course and implement flipped classrooms and work-based learning A small vocal minority however, is still not convinced that WBl and Flipped Classroom is the way to go and indicate they will not change anything.

In terms of qualitative feedback, several educators indicated that they gained confidence in implementing innovative pedagogies. For example, C4 indicated: "I have previous experience with the FC method (approx. 10 years ago) where I encountered difficulties because students would come to lectures unprepared despite the fact that they were evaluated by a test at the beginning of the class and they needed that prior knowledge in order to perform an exercise in class that also carried percentage of total grade. Encouraged by this course, I plan to introduce the flipped classroom method into the courses I teach, in certain units to begin with, to encourage my students to take a more active role in the teaching process. I believe that after the Covid pandemic and the experience with online teaching, this method would be more acceptable to students today and I hope that it will contribute to their motivation."

Indeed 19 Croatian educators specifically mentioned that they would include and/or update the principles of FC in their next teaching practice. Seven Croatian educators also mentioned that they would include and/or update the principles of WBL in their next teaching practice. While some Croatian educators would start to implement FC in their next teaching practices, others like C32 used the e-course to reflect on their existing practice and fine-tune some of their course elements. "To modify the existing subjects in which the mentioned pedagogical approaches are partially used so that they are even clearer (to each side, teachers and students) and to introduce some new activities that will undoubtedly improve the way of teaching, with the aim of the even better acquisition of both theoretical and practical knowledge, encouraging more students to work independently." (C32)

The German educators were perhaps more cautious about the impact of the e-courses, with four

colleagues like G32 indicated: "not sure yet". Two German educators like G14 indicated that they would use some of the concepts used, such as "I will teach a FC course in autumn for the first time and this course helped me to understand what I need to do".

The UK educators, like the German educators, were also more cautious in terms of how they would use the lessons learned from the e-courses. For example, U11 indicated "there is little space for innovation at an individual level where I work, but it does create food for thought", while U3 indicated that they would "share my perspectives with my colleagues to inform training". Only one out of five UK educators (i.e., U9) who completed the end survey indicated that they were "planning my courses with a more student-centred approach and how I can adapt the activities so we maximise learning opportunities when we meet in synchronous activities".

Points of improvements raised

From the open questions, several points of improvements were raised:
- Several educators found it difficult to work in groups and people from different institutions and cultures. For example, C6 indicated that "working in a group was disappointing for me because some people didn't show up or participate. We had a lack of communication." Similarly, C15 indicated that "the hardest thing for me was evaluating other works. They were not from my field of work, and besides, I don't have enough experience and knowledge in working with a flipped classroom, especially with the results of analyses".

Summary of evaluation and recommendation for the module 2 upgrade:

Overall the participants were satisfied or very satisfied (>60%) with the course and more than 50% have indicated the module has helped to improve their teaching practice. The format chosen seems to work but some small adjustments are necessary for the course to work even better. Recommendations for future runs of the module are:

- Decide whether the module is run as self-paced or instructor-paced and adapt the instructions and assessment format of the course accordingly. Group work and Peer Assessment will be a lot harder to implement in self-paced courses.
- If the module is run as instructor-paced the module should be open for at least 3 weeks perhaps even 4. Also in self-paced mode it would be good to inform participants that spreading the course over 3 - 4 weeks is recommended.
- Communicate deadlines even more clearly and ensure there is sufficient time to do the quizzes.
- If Modules are to be taken as stand-alone modules, care must be taken that new participants have access to the instructions about tools used in the preceding modules and that it is clear to them that they need these instructions to successfully complete the course.

Final numbers:

The course included: 155 participants in all roles
Total enrolled participants: 143
Total active participants: 91
Total successful participants (at least 75% of assessment points of the best result): 53

Success rate (%): 58.24
Participant in role of student filled in the final survey: 58
Active participants in role of student filled in the final survey: 64%

Finally, 143 **participants** were enrolled in this module, out of which **91 as students**. Of those, 91 students were active and engaged with the tasks and 53 of them reached the success threshold.

4. MODULE 2 - LET'S INNOVATE ASSESSMENT

4.1 GOALS

In this module participants have the opportunity to focus on the challenges of assessment in WBL and FC based on research-based pedagogical approaches:

1. Use meaningful assessment approaches such as Peer Assessment and Project assessment in the context of both WBL and FC in different learning environments and within different HEIs.
2. Look at how to integrate an innovative tool (for an open source LMS) that will provide support for peer and project assessment.

The goal of "Let's Innovate Assessment!" is dual:

1. To provide educators with hands-on training an assessment in FC and WBL settings in an online environment and to be able to transfer the acquired knowledge to peers at their institutions within local workshops;
2. To get feedback from educators on the content, design, and transferability of training performance.

Workload - Module 2 takes about 25 hours to complete (1 ECTS) depending on experience and expertise. It is estimated that participants should spend 2-4 hours in the Prepare phase, 5-12 hours in the Engage phase, and 10 in the (optional) Extend phase.

Authors and instructors:

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4.2 LEARNING OUTCOMES AND STRUCTURES

The learning outcomes of this module are related to:
- Designing and implementing inclusive assessment methods related to FC and WBL in an online environment taking into account learning outcomes and students' backgrounds
- Analyzing different academic subjects and align with appropriate assessment methods (constructive alignment)
- Designing and implementing assessment methods related to FC and WBL in an online environment considering study and subject field and student background and needs
- Implementing peer assessment(PA) and student project assessment using a peer assessment tool (app or software)

Analogue to Module 1, Module follows the 3-step structure inspired by the Flipped Classroom approach preceded by a short introduction:

4.2.1 INTRODUCTION
In the introductory part of Module 2 the participants are provided with:

- An Introduction to the course and the other parts of the e-course
- An introduction to the module.
- The Module Schedule
- Q&A Section
- A News and Notifications Section
- A choice of surveys: 1 for first arrivals in the overall course and one for returning participants in the course.

4.2.2 PREPARE

In the "PREPARE" phase, participants work mostly individually. Participants are asked to do some initial reading to familiarize themselves with the terms and concepts used in assessment as well as watch a few videos to further explain the challenges of assessment in the setting of the Flipped Classroom and Work-Based Learning. They are also asked to share their own (peer) assessment experiences so far. To successfully complete "PREPARE!" participants must complete the knowledge checks and contribute to the Discussion Forum.

An overview of all the activities in PREPARE! is given below:

- Live Session Q&A on 5 September was hosted via ZOOM, to introduce the course and answer any questions of participants. A Recording of the session was made available to those who could not attend.
- To introduce the participants to the principles of assessment, they were asked to watch a video on Assessment principles.
- Participants were subsequently introduced to the different assessment possibilities in the Flipped Classroom by asking them to read our brief summary of the research on assessment in the FC to date.
- Similarly, participants were introduced to the different assessment possibilities in Work-Based Learning by asking them to read our brief summary of the research on assessment in WBL to date
- After this learners checked their understanding of the material presented so far by completing two Knowledge Checks, one on Assessment in the Flipped Classroom and one on Assessment in Work-Based Learning
- The learners were then asked to introduce themselves to their fellow participants in the course and discuss their assessment experiences to date in Flipped Classroom and Work-Based Learning and to engage with their fellow participants

- The Prepare phase was completed by offering a Summary of the Key concepts covered in this section of the course.

4.2.3 ENGAGE

In the Engage! phase participants build on their acquired knowledge in the Prepare! phase, work in smaller groups, and also engage with other participants. They spend around 5-12 hours in the Engage phase.

The following activities are outlined in this phase:

- When to Assess? - Participants were asked to watch the video on designing and timing your assessment and how and when to employ Peer Assessment and the choices that you have when opting for PA.
- Participants were then asked to read an umbrella review of existing literature on PA to get a better feel of all possible design options available in PA.
- After this learners checked their understanding of the material presented so far by completing a Knowledge Check on PA Design Options
- To get inspired for their own peer assessment design, participants are asked to watch 3 videos of case studies as employed by the RAPIDE Team in their education and asked to read a document containing further selected case studies.
- To keep interacting with our participants we organized a live interactive online Talkshow on the sense and sensibilies of PA from TU Delft, allowing participants to interact with colleagues and experts and ask everything about PA they always wanted to know but were afraid to ask. A recording of this event was made available for those that could not attend.
- Then in groups (several continued in their groups from Module 1) learners were asked to design their own Peer Assessment for a course of their choice.
- As we practice what we preach, participants were subsequently asked to Peer Assess each other's design for PA in their course, as well as us as course team providing feedback on each design as staff.

- As in the Prepare phase, the Engage section was also completed by a summary of the Key Concepts in Peer Assessment presented in this phase.

4.2.4 EXTEND

In this optional part of the module, participants can take their learning even further by indulging themselves in additional resources on assessment and peer assessment in particular. In this part of the course, lasting 3 - 6 hours we prepared the following set of activities lined up for participants to indulge in:

- Overview of Digital tools for Peer Assessment - This section lists all resources known to us to aid you in creating PA.
- As we did not pretend to know everything we also asked the participants to share resources they felt we should know about on the Discussion Forum.
- As we want to offer a realistic view of Peer assessment this section goes into the Pitfalls for Peer Assessment presenting participants with relevant publications that list pitfalls and how to remediate them.
- As Rubrics are used a lot in PA, this section provides reading material on how to use Criteria-based assessment and Rubrics in the Assessment of PBL
- Finally we presented the participants with a relatively new type of peer assessment tool: Comparative Judgment as a Type 1 Peer Review tool.

Farewell but not Goodbye!

Dear Participants,

Thank you for your active participation in this course. For us, it is a farewell and not a goodbye. We hope you will stay in touch and continue to exchange ideas, experiences and best practices. We thoroughly enjoyed making the course, we hoped you enjoyed taking it! Do leave us some feedback below, so that we can improve the course for its next run!

So farewell and until we meet again!

The RAPIDE Course Team

FEEDBACK

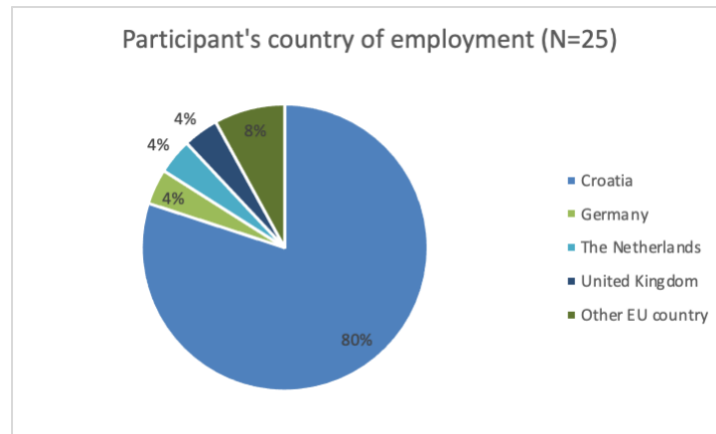Anonymous final evaluation of the module

Feedback in a forum

In the farewell section of the course, we of course asked the participants for their feedback on the course.

4.3 PILOTING RESULTS

Survey:

Participants were invited to share their experiences of the Let's innovate Assessment! module and help our project evaluation by completing a survey. The survey took approximately 5-8 minutes to answer

and all feedback was anonymous. 25 participants submitted their feedback on 31 questions with very positive results and constructive feedback. The geographical location of the participants is shown in the figure below.


Participant's country of employment (N=25)

A total of 27 closed questions were asked and 4 open questions. The answers to the first three of these open questions, 1) what element of the e-module did you like most, 2) what element of the e-module did you like the least, and 3) what would you suggest we change or improve for the next implementation of this module, will be discussed alongside the closed questions. The last open question on how the module will affect the participants' teaching practice will be discussed separately.

When asked about their experience in the course, participants were overwhelmingly positive as can be seen from the figure below. Many indicated they really enjoyed working with others and that they learned a lot from this course. Sadly a small minority did not enjoy the course as much. From the open questions this appeared to be mostly caused by general unhappiness about the WBL and flipped Classroom as a teaching format and frustrations in using Moodle Workshop and the BDP tool.

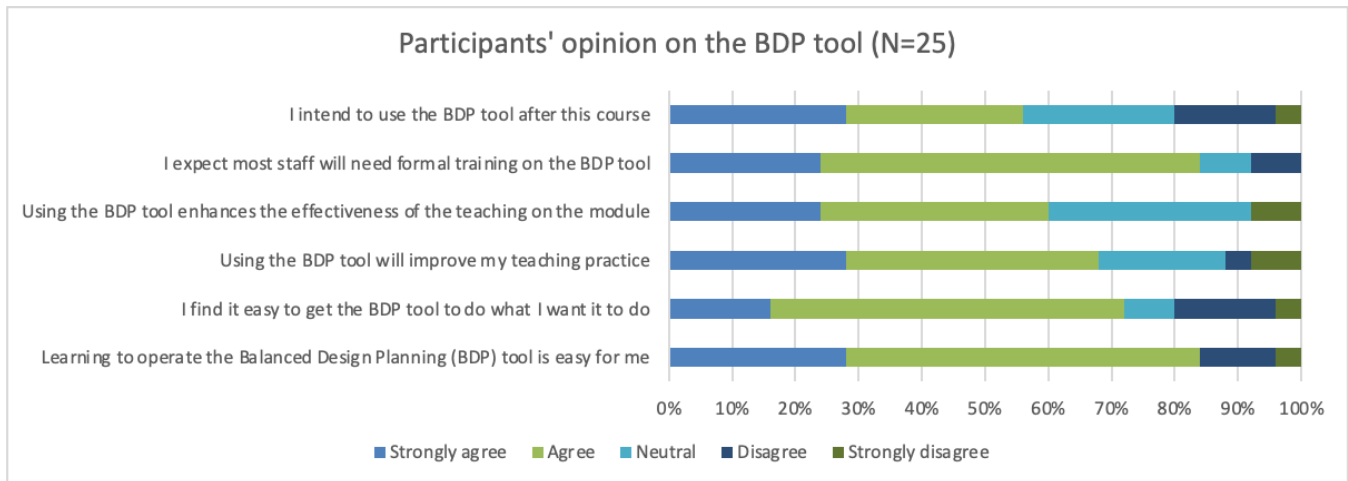Participants' experiences in the course (N = 25)
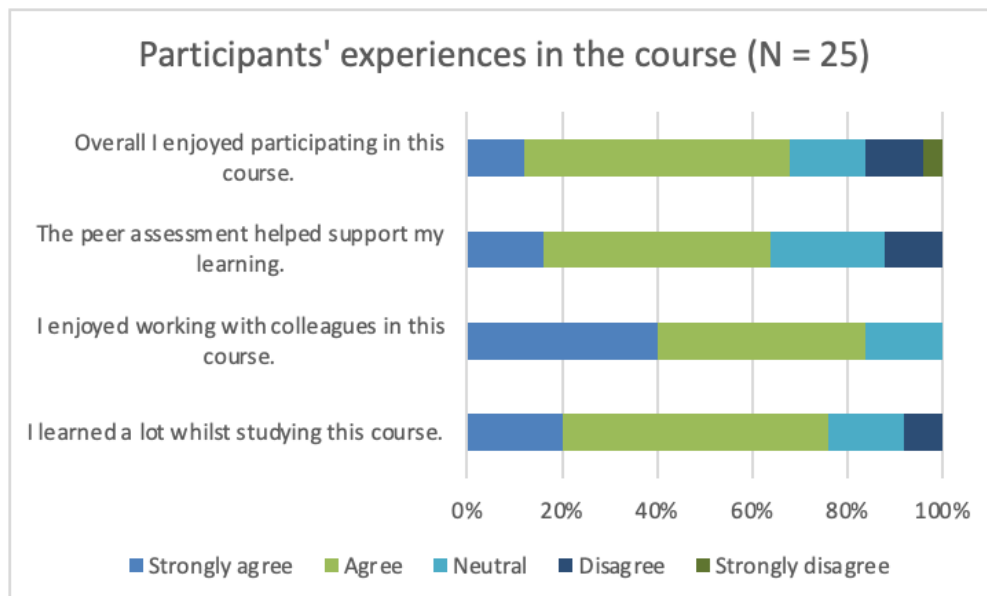
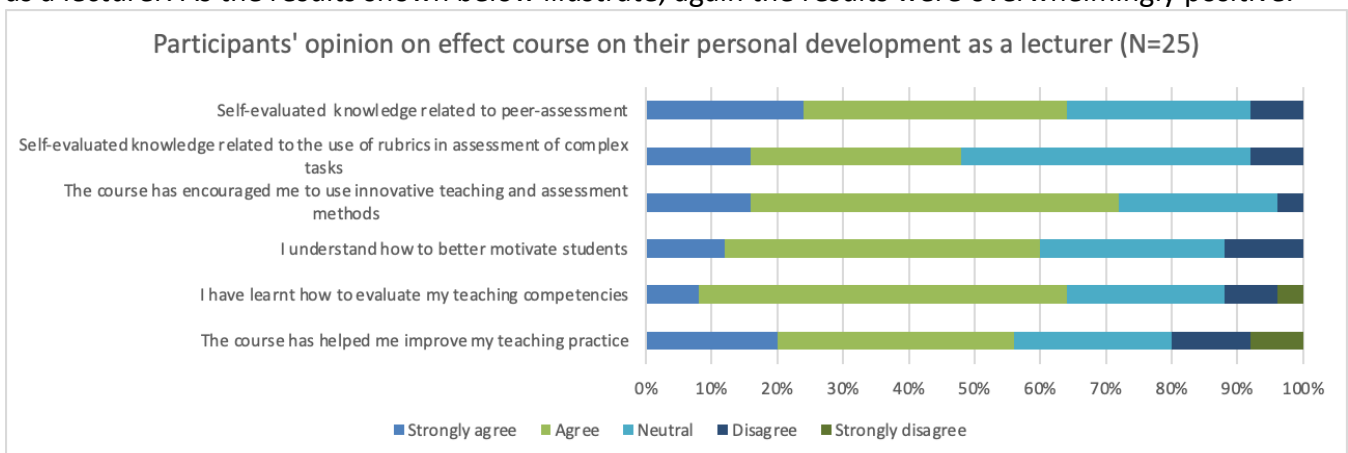Also the interaction levels in the course were high: 22 out of the 25 participants indicated that they

interacted with others during the course. When asked about their opinion of the offerings within the course, participants were again very positive as can be seen from the figure below, although a small minority were unhappy with the online ZOOM sessions and the Workshop Tool in Moodle. This may be caused by participants who joined module 2 without taking part in module 1 and therefore would have needed more support in using the Workshop Tool and would have liked to have seen more support in the Online Zoom sessions. Some of the comments in the open questions indicated that this may have been the case. Also, from the open questions, it appeared it was not always straightforward for all participants how to implement the Peer Assessment design in a clear way in the BDP tool.
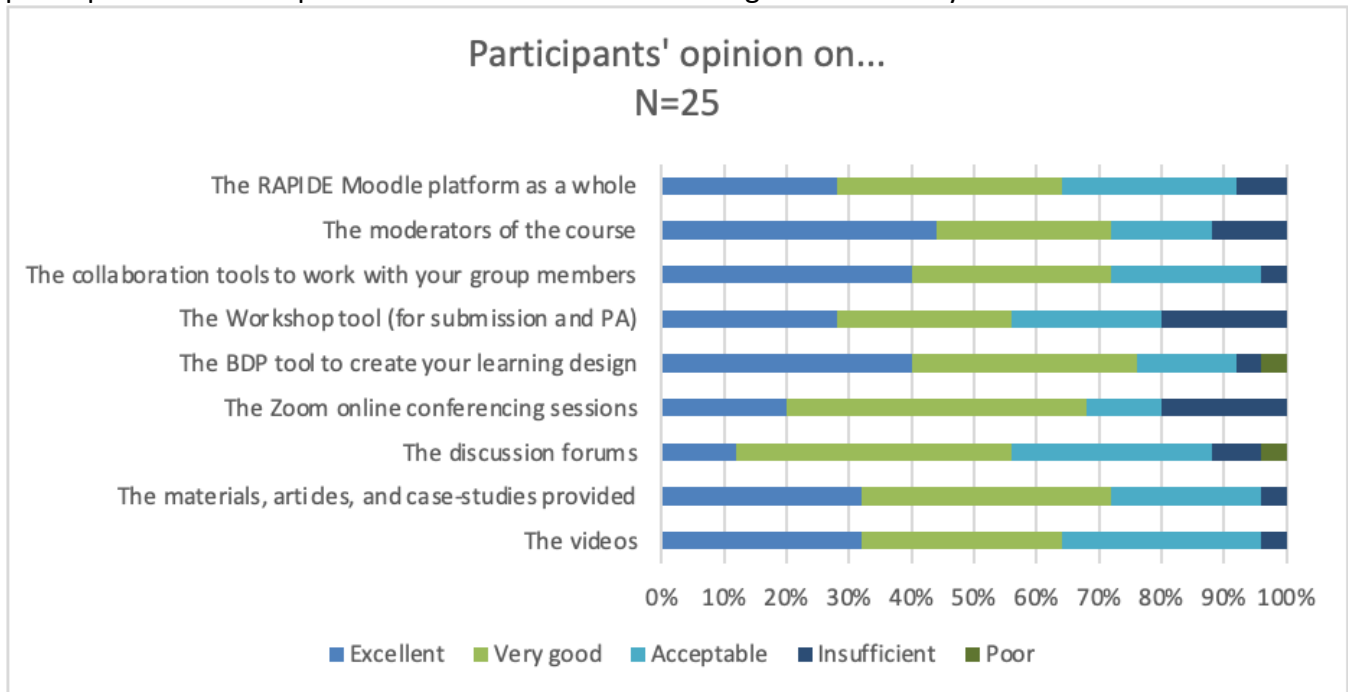
Participants in Module 2 were also asked about their opinion of the use of the BDP tool in the course. The outcomes are listed below. Overall the feedback is again positive although a small minority does indicate to have problems with navigating the BDP tool. This may be caused by participants who joined module 2 without taking part in module 1 and therefore would have used the BDP tool for the first time and may have therefore had a steeper learning curve than returning participants from Module 1. This is supported by some of the comments in the open questions in the course.

Participants' opinion on the BDP tool (N=25)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree

(chart for statements:)
- I intend to use the BDP tool after this course
- I expect most staff will need formal training on the BDP tool
- Using the BDP tool enhances the effectiveness of the teaching on the module
- Using the BDP tool will improve my teaching practice
- I find it easy to get the BDP tool to do what I want it to do
- Learning to operate the Balanced Design Planning (BDP) tool is easy for me

Finally, we also asked the participants on the effect Module 2 has had on their personal development as a lecturer. As the results shown below illustrate, again the results were overwhelmingly positive.

Participants' opinion on effect course on their personal development as a lecturer (N=25)

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree

(chart for statements:)
- Self-evaluated knowledge related to peer-assessment
- Self-evaluated knowledge related to the use of rubrics in assessment of complex tasks
- The course has encouraged me to use innovative teaching and assessment methods
- I understand how to better motivate students
- I have learnt how to evaluate my teaching competencies
- The course has helped me improve my teaching practice

What will participants change in their teaching practice?

An open question was also asked on the ways participants would adapt or change your practice as a result of studying this course? A total of 21 answers were received with many indicating they are considering changing the way they assess in their course and implement peer assessment. A small vocal minority however, is still not convinced that WBl and Flipped Classroom is the way to go and indicate they will not change anything.

Points of improvements raised

From the open questions, several points of improvements were raised:

- The time to complete the course should be more than two weeks. Many participants complained there was insufficient time to complete the course.
- Communicate deadlines even more clearly and ensure there are reasonable times set to complete assignments and quizzes.
- Ensure that Module 2 is truly stand-alone by providing instructions on all tools used as if the participants had not taken module 1. This may mean adding an additional assignment on creating a course design in BDP to help use the tool in the Peer Assessment design phase.
- Redesign Peer Assessment such that groups are formed more easily and that adding a PA

design to the BDP course design is done in a standard way to ease PA using Moodle Workshop.
- Either have an additional ZOOM session on using Moodle Workshop for Peer Assessment or create an instruction video.

Summary of evaluation and recommendation for the module 2 upgrade:

Overall the participants were satisfied or very satisfied (>60%) with the course and more than 50% have indicated the module has helped to improve their teaching practice. The format chosen seems to work but some small adjustments are necessary for the course to work even better. Recommendations for future runs of the module are:

- Decide whether the module is run as self-paced or instructor-paced and adapt the instructions and assessment format of the course accordingly. Group work and Peer Assessment will be a lot harder to implement in self-paced courses.
- If the module is run as instructor-paced the module should be open for at least 3 weeks perhaps even 4. Also in self-paced mode it would be good to inform participants that spreading the course over 3 - 4 weeks is recommended.
- If instructor-paced: Assist and where necessary enforce the forming of groups including using deadlines. This did not go as well as hoped in the module, leaving people frustrated.
- Communicate deadlines even more clearly and ensure there is sufficient time to do the quizzes.
- If Modules are to be taken as stand-alone modules, care must be taken that new participants have access to the instructions about tools used in the preceding modules and that it is clear to them that they need these instructions to successfully complete the course.

Final numbers:

- The course included 106 participants in all roles
- Total enrolled participants in a role of student: 97
- Total active participants (students): 66
- Total successful participants (completing the course with at least 75% of the best result): 31
- Success rate (%): 47%
- Participant in role of student that filled in the final survey: 25
- Active participants in role of student that filled in the final survey: 42%
-

Finally, 106 **participants** were enrolled in this module, out of which **97 as students**. Of those, 66 students were active and engaged with the tasks and 31 participants received the Certificate of successful completion. 25 participants filled in the final survey which is 42% of active participants.

5. MODULE 3 - LET'S INNOVATE SUPPORT

3 Let's innovate support

Let's get flipped!

Support your teaching with *learning analytics*:

1/ use dashboards for teachers and students for flipped classroom and work-based learning

2/ interpret and ethically use data delivered on the dashboards

3/ foster inclusiveness and help students at risk

WORKLOAD: 1 ECTS

START DATE: September 26, 2022
LIVE SESSIONS: September 30 /October 6, 2022
OPTIONAL CLOSING EVENT: October 13, 2022
OTHER ACTIVITIES: asynchronous

HOW TO JOIN: Register and join the module:
learn.rapide-project.eu

5.1 GOALS

- This module dives into learning analytics and dashboards in the context of Flipped Classroom (FC) and Work-Based Learning (WBL).
- This module introduces learning analytics, which offers important insights into learning processes by analyzing and reporting digital data about students' learning, collected primarily in learning management systems. Insights provided by learning analytics can help teachers better understand their students' learning, recognize their weaknesses, and according to that, design their teaching and provide appropriate feedback. They can also support students in informed decision-making and self-regulated learning.
- What students and teachers usually interact with in terms of learning analytics are visualizations presented in dashboards. Therefore, this module puts a special focus on exploring and discussing the specific needs of both students and teachers. It also draws attention to data interpretation and ethical use of data, essential in making use of learning analytics.

5.2 LEARNING OUTCOMES AND STRUCTURES
Learning Outcomes

- At the end of this module, you will be able to:
- Analyze aspects in which learning analytics can be used in order to support students in learning and their teachers in facilitating students' learning in an online environment.
- Analyze learning analytics models and dashboards that support students in the flipped classroom and work-based learning in an online environment, taking into account study and subject field and student background and needs.
- Interpret learning analytics data taking into account ethical aspects of learning analytics.
- Relate learning analytics to the social impact and informed decision-making in higher education.
- All the materials available within this e-course have been prepared in line with the Creative Commons licence (CC BY NC SA).

Course Set up:

The course consists of three phases, which form the backbone of each of the 4 RAPIDE e-course modules in-line with the flipped classroom approach:

PREPARE! – in this phase, you will work independently to acquire basic concepts related to learning analytics, by engaging with introductory materials and taking part in quizzes

ENGAGE! – in this phase, you will engage with your peers and take part in collaborative learning, and your skills will be evaluated in group activities

EXTEND! – in this phase, you will be provided with materials to further extend your knowledge independently

Workload:

Module 3 takes about 25 hours to complete (equivalent to 1 ECTS) depending on your experience and expertise. We estimate that you should spend 2-4 hours in the Prepare! phase, 6-12 hours in the Engage! phase, and 3-12 in the Extend! phase.

5.2.1 INTRODUCTION

In the introductory part the participant are provided with:
- introduction to the course
- introduction to the module
- module schedule
- Q&A section
- news and notification section
- initial survey that is anonymous designed to collect the data as the basis for adapting the course to participants' needs.

Welcome! In this module you will have an opportunity to innovate your current teaching by introducing learning analytics and dashboards for flipped classroom and work based learning.

About Module | Schedule

🌟 WELCOME		☑
📄 Introduction video by Professor Blazenka Divjak (University of Zagreb)		☑
📄 About the overall Let's get flipped! e-course		☑
📣 LET'S START WITH THE MODULE		☐
📄 Introduction video on Module 3: Let's innovate support!		☑
📄 About module		☑
📄 Module schedule		☑
💬 News and notifications		
💬 Questions and answers		☑
📊 SURVEY		☐
➡ For those who did not take it in modules 1 and 2: Introductory survey on the profile and pre-knowledge of participants		☐
➡ For those who already took the surveys in modules 1 and 2: Additional information, comments and suggestions (optional)		☑

5.2.2 PREPARE

Since the e-course is prepared in line with the flipped classroom approach it starts with the Prepare! phase, in which participants work mostly individually. It is an estimate that they should spend 2-4 hours in the Prepare! phase depending on their previous expertise and experience.

In order to successfully complete the Prepare! phase there are several tasks for participants to engage with:

Task 1.1: Watch the introductory video on learning analytics (LA) & dashboards

Task 1.2: Read the introductory reading material on LA

Task 1.3: Take a short quiz on LA basics

Task 1.4: Discuss your experiences with LA in a forum

5.2.3 ENGAGE

While in the first phase participants mainly worked individually, in the Engage! phase they build on their acquired knowledge and work in smaller groups, in which they engaged with other participants. We estimate that we should spend around 6-12 hours in the Engage! phase.

This phase includes the following tasks:

Task 2.1: Participate in the first live session with Q&A and the introductory exchange of experiences

Participants consider some additional literature, as well as their own experiences, and share their thoughts and ideas with peers in a synchronous introductory exchange. They also learn about the

results of the RAPIDE team's research related to LA dashboards. They have the opportunity to ask any questions about LA or the module itself, and familiarize with tasks in the rest of the module.

Task 2.2: Read to investigate students' and teachers' perspectives on LA dashboards

Participants investigate the materials available in this e-course, but also beyond, to learn about the features of LA dashboards expected and needed by students and teachers.

Task 2.3: Work in groups to prepare concepts for student or teacher dashboards (by 7 October 2022, 23:59 CET)

Using the results of their investigation, participants work in groups to identify the key features and prepare concepts for student or teacher dashboards for flipped classroom and problem-based learning.

Task 2.4: Peer-assess the concepts for student or teacher dashboards (by 11 October 2022, 23:59 CET)

In the next step,participants change their perspectives, and take part in the peer-assessment of other groups' work. They are provided with clear criteria and levels within a rubric, which will support you in assessing your peers fairly.

Task 2.5: Participate in the second live discussion with Q&A and presentation of dashboard concepts

Finally, participants join in another synchronous discussion: present your dashboard concepts and share their thoughts on the key challenges of LA!

learnTOGETHER!

YOUR TASKS	✅
📄 Detailed instructions on the Engage! activities	✅
LIVE SESSION	✅
🔗 Task 2.1: Live session with Q&A and exchange of experiences (30 September, 14:00-14:45 CET)	✅
🔗 Recording Live session 30/09/2022	✅
SELF-LEARNING	☐
📁 Task 2.2: Reading & investigation of students' & teachers' perspectives on LA dashboards	✅
PRODUCTION & PEER-ASSESSMENT	☐
📄 Task 2.3: Preparation of concepts for student or teacher dashboards in groups	✅
📄 Task 2.4: Peer-assessment of dashboard concepts	☐
👥 Group choice	☐
💬 Group forum	☐
ⓑ Group meeting room	☐
🔁 Workshop for submission and peer-assessment of dashboard concepts (submission by 9 October 23:59 CET, peer-assessment 12 October 23:59 CET))	☐
LIVE SESSION	☐
🔗 Task 2.5: Live session with Q&A, dashboard concepts presentation and discussion (6 October 2022, 14:00 - 15:00 CET)	☐

5.2.4 EXTEND

We estimate that it should take 3 - 12 hours to complete this phase.

In order to do so, we invite participants to take part in the following:

Task 3.1: Investigate & read the course materials related to data interpretation & ethical use of data

To learn more about data interpretation, participants read the Tips & tricks developed within the RAPIDE project. Then, they dig deeper into the ethical aspects of LA, and investigate the Ethical guidelines.

Task 3.2: Participate in problem-solving related to data interpretation

After initial investigation, participants take part in some problem-solving and work on an assignment from a real-world context related to data interpretation in an educational setting.

Task 3.3: Listen to podcasts with LA experts

Participants listen to the perspectives, experiences and visions of renowned experts in LA. This will give them an even wider idea of what benefits LA can provide us with, and maybe give them some ideas for your future research and practice.

The first podcast expert is Prof. Dragan Gašević, Monash University Australia, one of the founders of the learning analytics field and the most prominent researcher talking about historical development, state of the art and possible future contributions of learning analytics.

The second podcast expert is Prof. Bart Rienties, The Open University (OU) UK, one of the global leading authorities in learning analytics and learning design explaining how learning analytics has been used at the OU and what are the benefits of it for higher education institutions.

Task 3.4: Discuss ethical use of data in the discussion forum

In the discussion forum, participants share views and ideas related to the ethical use of data in higher education and reflect on the Ethical use of data.

Task 3.5: Join the final live session for closing remarks

Finally, participants join for a wrap-up at the closing live session of this module and share their final thoughts, questions, lessons learnt, and suggestions.

Task 3.6: Revisit the materials provided in the module

Task 3.5: Join the final live session for closing remarks

learnBEYOND!

Task 3.6: Revisit the materials provided in the module

📖 YOUR TASKS		☐
📄 Detailed instructions on the Extend! activities		☑
📖 INVESTIGATION		☐
📙 Task 3.1: Reading & investigation on data interpretation & ethical aspects of LA		☑
⚙️ PRODUCTION		☐
📄 Task 3.2: Problem-solving assignment on data interpretation		☐
💬 Discussion on the problem-solving assignment		☐
👥 LISTEN & REFLECT		☐
🔊 Task 3.3.: Podcast on institutional implementation of LA (with Professor Bart Rienties)		☑
💬 DISCUSSION		☐
💬 Task 3.4: Discussion on the ethical use of data		☐
👥 LIVE SESSION		☐
🔗 Task 3.5: Final live session (13 October 2022, 14:00 - 14:30 CET)		☑
🔗 Recording of the final live session		☐
💻 FEEDBACK		☐

5.3 PILOTING RESULTS

Participants are invited to share their experiences of the Let's innovate support! module and help our project evaluation by completing this survey. It takes approximately 5-8 minutes to answer questions and feedback is anonymous.

In total 25 participants submitted their feedback on 24 questions and results were affirmative.

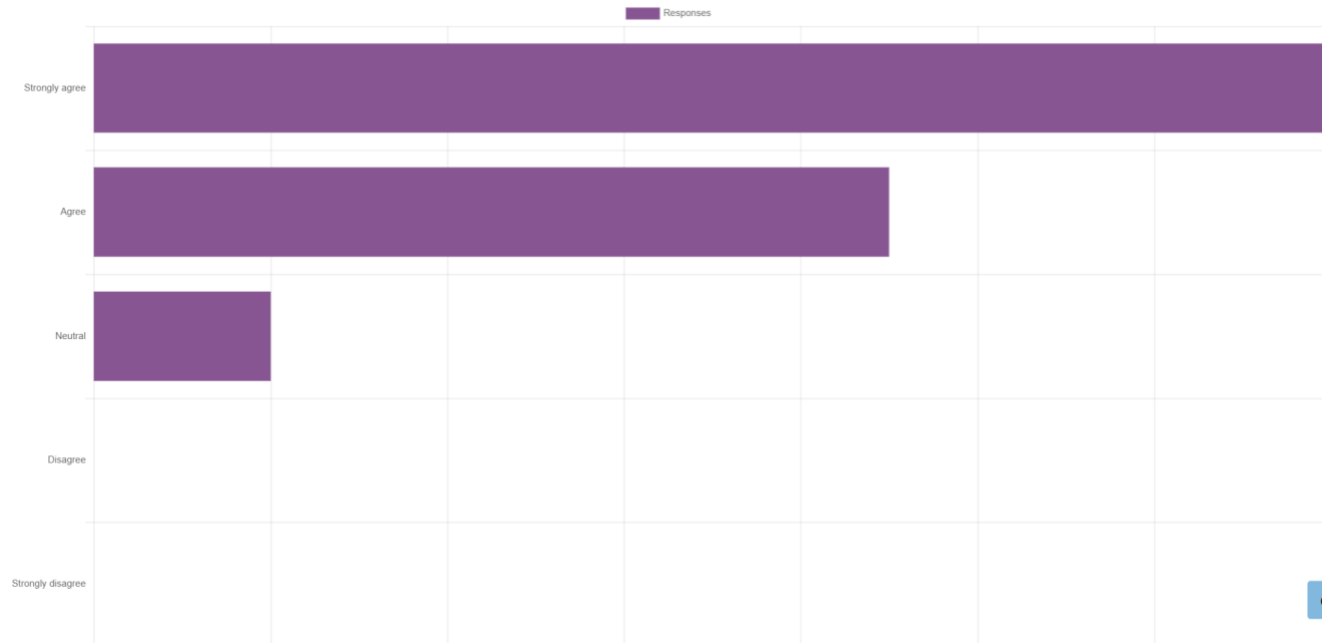Great majority of them agree that they learned a lot whilst studying this module.

I learned a lot whilst studying this course.

Participants also declared that they enjoyed working with their colleagues.

I enjoyed working with colleagues in this course.

There were also qualitative answers such as the following.

What was the element of the e-module that you liked the most? Please explain why?

Teamwork on dashboard concepts. I think it gave a good opportunity to first reflect on the content of the preparatory materials, and then get creative and think about what is needed in dashboards by teachers and students in our educational contexts.

The assignments were challenging which pushed the whole group to collaborate. Also, it motivates us to read additional materials to be able to accomplish our task.

Much closer to personal experience than I have expected

What was the element of the e-module that you liked the least? Please explain why?

I can not say which element of the e-module that I liked the least because there was a lack of time due to everyday duties at our school.

I did not enjoy the peer assessment as with this topic I have very limited knowledge so it did not feel right to give feedback.

Much of the extend phase material would be useful during the main phase of learning - it is unclear why it isn't made available as extension material for those who want/have time to look at it during the main phase.

Summary of evaluation and recommendation for the module 3 upgrade:

Evaluation of the module was positive and the concept of the module was accepted by a great majority of participants.

Participants complained mostly about the tight work schedule and asked more instructions how to finish tasks. A few of them were unsecure how to perform peer assessment and there was suggestion that some material from the *extend* phase needed to be moved into the *engage* phase.

Final numbers:

The course included: 91 participants in all roles
Total enrolled participants in a role of student: 85
Total active participants (students): 62
Total successful participants (completing the course with at least 75% of assessment points): 33
Success rate (%): 53
Participant in role of student filled in the final survey: 25
Active participants in role of student filled in the final survey: 40%

Finally, **91 participants** took place in this module, out of which **85 as students**. 62 students were active and engaged with the tasks and 33 of them received Certificates of successful completion. 25 participants filled in the final survey which is 40% of active participants.

6. MODULE 4 - IMPACT ANALYSIS OF INNOVATIVE PEDAGOGIES

6.1 GOALS

This Module can be taken as part of the full e-course but can also be taken as a stand-alone module. In this module, we will dive into evaluation and impact analysis in the context of Flipped Classroom(FC) and Work-Based Learning(WBL).

6.2 Learning outcomes and structures

Learning Outcomes

At the end of this module, you will be able to:

- Plan the impact analysis for a FC- or WBL-based lecture with the logical model results staircase
- Measure the impact of innovative teaching like FC or WBL on strategic goals of your institution
- Investigate indicators and appropriate scales suitable for the chosen evaluation objectives.
- Create an evaluation concept or a study design for the impact analysis from the selected indicators

Course Set up:

The course consists of three phases, which form the backbone of each of the 4 RAPIDE e-course modules in-line with the flipped classroom approach:

PREPARE! – in this phase, you will familiarize yourself with basic terms and concepts related to strategic planning in higher education as well as evaluation and impact analysis of courses. Texts and videos are available for this purpose. In a forum you will have the opportunity to share your experiences with the other participants. The phase will conclude with a self-assessment test.

ENGAGE! – in this phase we go into practical application. You will plan your own evaluation objectives for FC or WBL courses using a step-by-step model for impact analysis and create an evaluation concept for your course. In several webinars, you will discuss and evaluate each other's developed concepts in small groups.

EXTEND! – in this phase, we offer you the opportunity to go beyond the basics and share more ideas and resources about evaluation, impact analysis and strategic planning with you. This part of the course is optional.
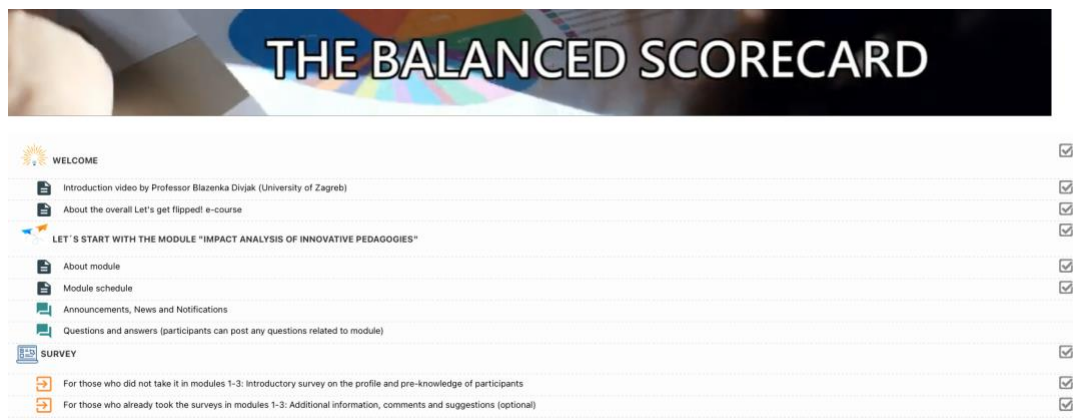
Workload

Module 4 takes about 25 hours to complete (equivalent to 1 ECTS) depending on your experience and expertise. We estimate that you should spend 1-4 hours in the Prepare phase, 5-12 hours in the Engage phase, and 10 in the (optional) Extend phase. Note, that these workloads are estimates and we are keen to learn whether these are realistic or not.

Accreditation and Assessments

Participants who complete some activities will receive a Certificate of Attendance. Participants who complete at least 75% of the activities in the Prepare and Engage phase will get a Certificate of Completion.6.2.1 INTRODUCTION

The introduction part included videos about the MOOC, the Module and module schedule:

6.2.2 PREPARE
This e-course is prepared in line with the flipped classroom approach. Therefore, it started with the Prepare! phase, in which participants worked mostly individually for 2 to 5 hours depending on previous expertise and experience.

In order to successfully complete the first phase, participants were invited to engage with the following tasks:

- Task 1.1 Watch & Read the introductory video and reading material on impact analysis
- Task 1.2 Watch & Read the introductory video and reading material on methodology for measuring the impact of innovative teaching and learning approaches on strategic goals (MIT)

These materials provided participants with some insights into the basics of impact analysis and the foundation of the rest of the module.

- Task 1.3 Take a short quiz on the basics of impact analysis and measuring (due by 20 October 2022, 20:00 CET)

After that, to check their understanding, participants took a short quiz. The quiz enabled them to reflect and check their knowledge about the key concepts and ideas related to impact analysis and measuring, covered by the introductory materials.

- Task 1.4 Discuss your experiences in a forum

The discussion gave an opportunity to share thoughts, ideas and experiences with other participants in a written form.

The next phase, Engage!, started on 20 October 2022. The next live session (via Zoom) started on 21 October 2022 at 14:00 CET.

Prepare!

learnINDEPENDENTLY!

YOUR TASKS

Instructions on Prepare! activities

SELF LEARNING

TASK 1.1 WATCH & READ - Introduction to impact analysis

TASK 1.2 WATCH & READ - Introduction to MIT

ASSESSMENT

TASK 1.3 QUIZ - Selfassessement Test

DISCUSSION

TASK 1.4 DISCUSS - Discussion on impact and strategy

6.2.3 ENGAGE

In this phase, asynchronous learning sections in which participants work independently and individually alternate with live sessions in which they present the work results in small groups and discuss them with other participants. Estimated workload is 6-12 hours in the Engage! phase. This phase includes the following tasks:

- TASK 2.1: PLANNING impact analysis with the staircase model on your own course

Participants apply the stages from the Staircase model to own course (FC or WBL). What evaluation goals would they like to pursue? They use the Word template in the course and bring the completed template to the live session on 21 October.

- TASK 2.2: PARTICIPATE in the first Live Session: Discuss your planning sheets in small groups (21 October, 2022, 14-16 CET)
- TASK 2.3: CREATE an evaluation concept for your own course

Based on the evaluation goals for your event, create an evaluation concept or study design. For this purpose, you will select suitable methods, indicators and scales and plan your concept with the help of a template. Bring the completed template to the live session on 27 October.

- TASK 2.4: PARTICIPATE in the second Live Session: Discuss the evaluation concepts of your course in small groups (27 October, 14-16 CET)
- TASK 2.5: WATCH a lecture about Measuring the influence of innovative teaching activities on strategic goals (MIT)
- TASK 2.6: APPLY the MIT on your own lecture by working in groups

Apply the MIT to the example of a specific course. You will work in groups. Use the suggested template for the application.

TASK 2.7: PARTICIPATE in the third Live Session: Present the results of your MITs in 5-minute pitches. (4 November, 14-16 CET)

6.2.4 EXTEND

In this optional part of the module, participants can take their learning even further by indulging themselves in additional resources on impact analysis and strategic planning in HEIs. In order to successfully perform the Extend! phase the following activities were planned:

1. Participants have the option to engage with further publications

- TASK 3: READ - More on impact analysis and strategic planning in HEIs

6.3 PILOTING RESULTS

Participants are invited to share their experiences of the Let's innovate support! module and help our project evaluation by completing this survey. It takes approximately 5-8 minutes to answer questions and feedback is anonymous.

In total 15 participants submitted their feedback on 23 questions and results are affirmative.

Great majority of them agree that they learned a lot whilst studying this module.

Participants also declared that they enjoyed working with their colleagues.

I enjoyed working with colleagues in this course.
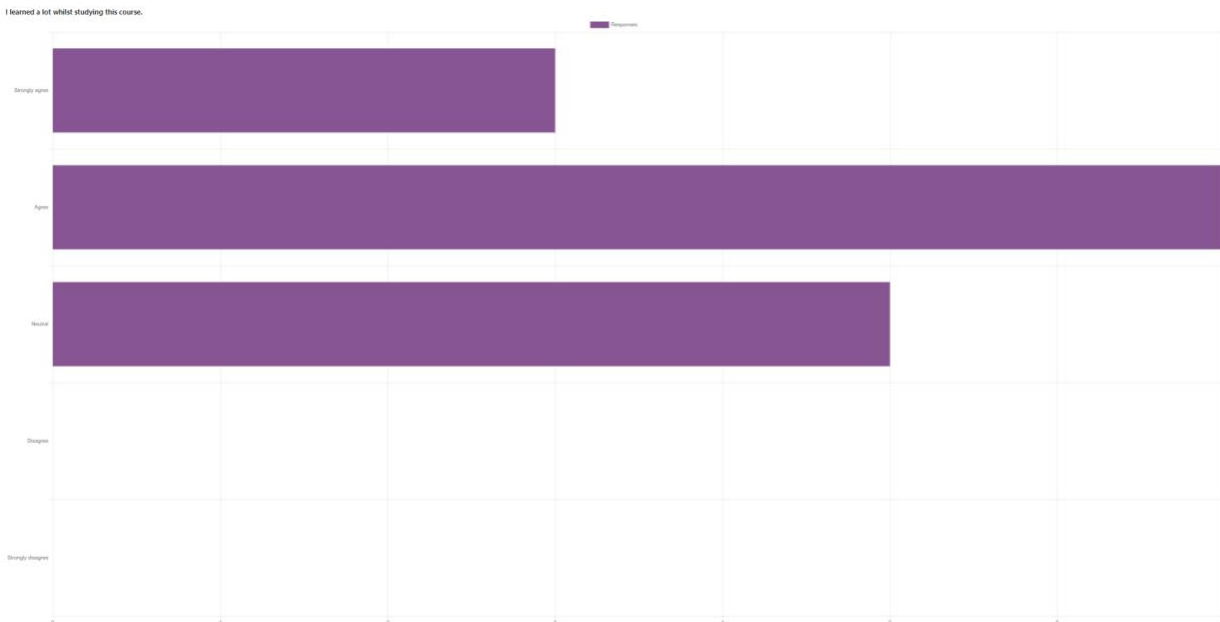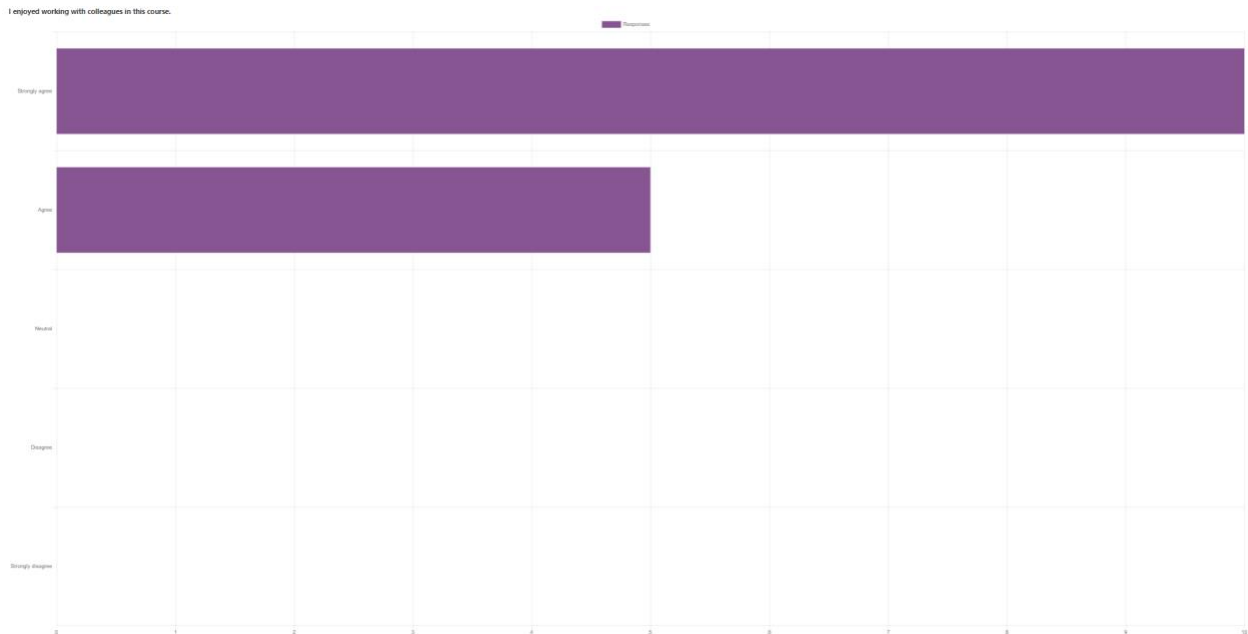
There were also qualitative answers such as

What was the element of the e-module that you liked the most? Please explain why?

➔ Team work
➔ Videos were excellent.
➔ Gave me the opportunity to learn and discuss with members of my group.
➔ Great learning materials and video lessons.
➔ The mix from video, literature reading and group work with mid term presentations.
➔ Overall, even though for both there was complexity in the task and workload involved, I enjoyed and liked to have participated as in the end I can say I actually learned something.
➔ Discussion in Live sessions. I could hear what others think.
➔ Staircase and MIT approaches, because they gave me a new perspective. Group work and breakout sessions, because they provided an opportunity to discuss and consider other participants' perspectives on the tasks.

What was the element of the e-module that you liked the least? Please explain why?

➔ A questionable overview of the course. At the beginning it was unclear where the social impact analysis is related to our group assignment.
➔ Short deadlines, no examples of how the task should be done (except for the task 2.1, the reading materials and template helped a lot)
➔ There was too much material. I do not think we could study it in detail in the given time. Also, the tasks were very poorly defined, we spent a lot of time thinking about what exactly we had to do and how should we do it. We spend too much time on every activity in this module.

➔ Complex activities that were difficult to cover at fast pace

Summary of evaluation and recommendation for the module:

Evaluation of the module was positive and the concept of the module was accepted by a great majority of participants.

Participants complained mostly about the tight work schedule and the complex activities.

Final numbers:

The course included: 78 participants in all roles
Total enrolled participants in a role of student: 67
Total active participants (students): 42
Total successful participants (completing the course with at least 75% of best grade): 22
Success rate (%): 52
Participant in role of student filled in the final survey: 15
Active participants in role of student filled in the final survey: 35,71%

Finally, **78 participants** took place in this module, out of which **67 as students**. 42 students were active and engaged with the tasks and 22 of them received Certificates of successful completion. 15 participants filled in the final survey which is 35,71% of active participants.

7. OVERVIEW OF PARTICIPATION AND EVALUATION

The interest for all four modules was high. Obviously the tempo of delivery was very tight (participants pointed that out in evaluations) and for many of the teachers it was difficult to work actively in the MOOCs along with other obligations. For the future delivery it would be recommended to lower the pace of delivery.

PARTICIPANTS (STUDENTS) PER MOOC

ENROLLED ACTIVE
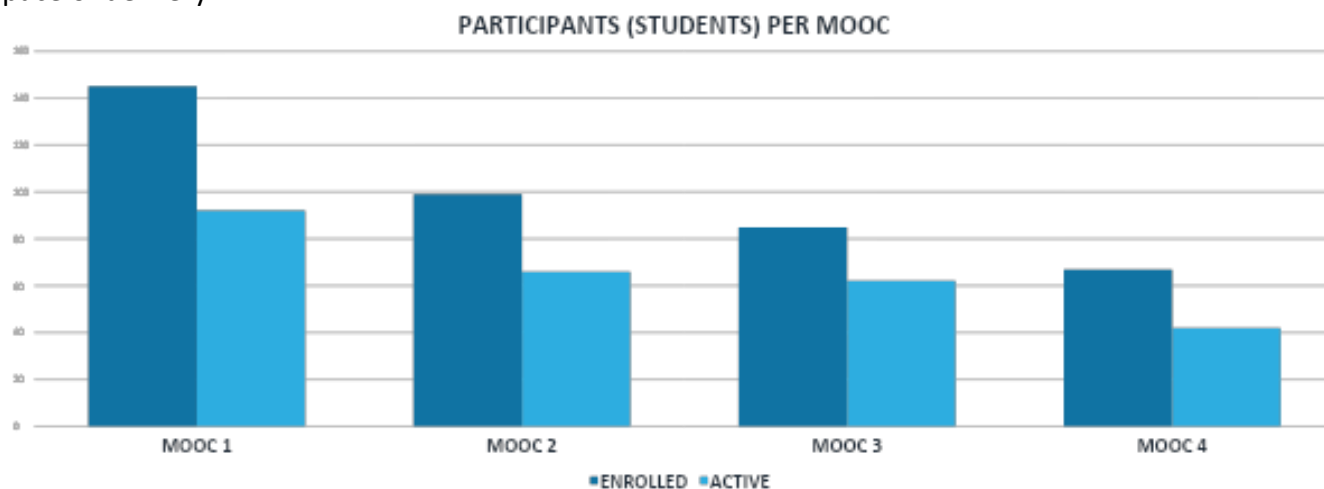
Participants evaluated the MOOCs as very useful and of high quality. Answers to open-ended questions gave useful recommendations for further improvement of learning material and learning designs of the MOOCs.

FINAL EVALUATION:
PERCENTAGE OF STUDENTS WHO (STRONGLY) AGREED WITH HAVING LEARNED A LOT
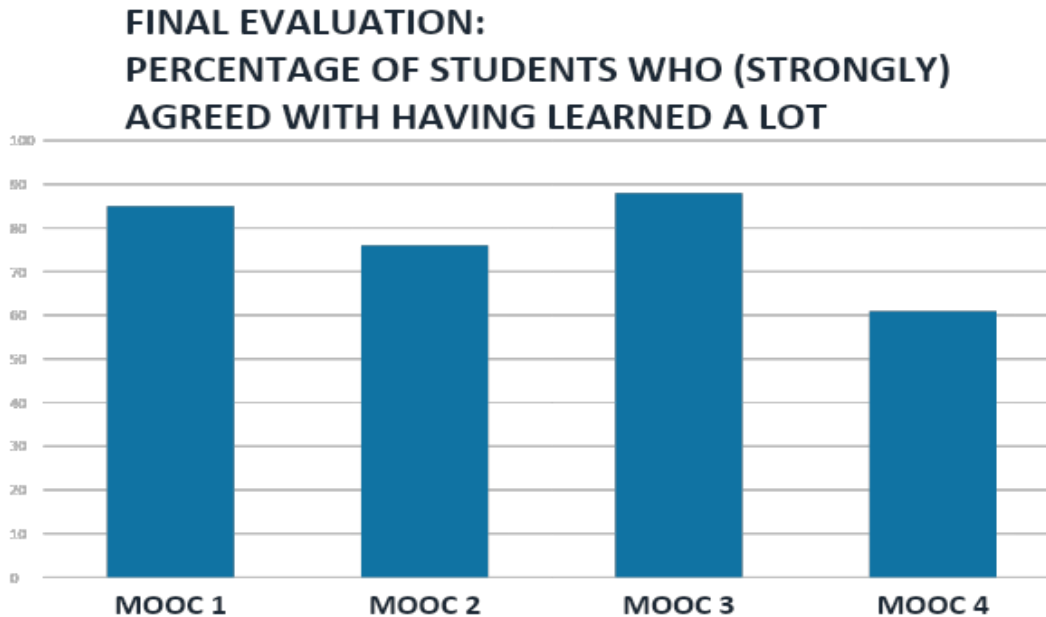
8. INCLUSIVENESS

RAPIDE MOOC is created to support higher education teachers to improve their skills and transcultural experience which will enable them to be more competent in further delivering the education and assessment within a diverse student population.

In its Communication on achieving a European Education Area (EEA) (4) by 2025, the Commission outlines two key initiatives. These aim to address pressing educational challenges related to underachievement and early leaving from education and training within the EU. As one indicator of the need for education improvement, the level of underachievement, in the EU as a whole, has increased in science and reading, while remaining stable in mathematics. It is generally recognised that underachievement and early leaving are symptoms of more deeply rooted challenges in education. **These relate to a need for education providers to have access to approaches and competences enabling them to embrace student diversity; to offer secure and inspiring learning environments; and to motivate all learners regardless of their socioeconomic background, ethnic origin or disabilities.** (https://education.ec.europa.eu/et/news/inclusive-education-in-europe-learning-from-erasmus)

This result, therefore, is in line with the conclusions of the OECD Teaching and Learning International Survey (TALIS), particularly this that teachers and trainers need continuous opportunities for professional development. (https://read.oecd-ilibrary.org/education/talis-2018-results-volume-i_1d0bc92a-en#page7)

According to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions the higher education and VET systems need to adapt to strengthen their key role in supporting lifelong learning and reaching out to a more diverse student

body. The need for more flexible and inclusive learning paths has increased as the student population is becoming more diverse and the learning needs more dynamic. (https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0625&from=EN)

All of these are the foundations of inclusive education, which is based on the following principles:

- Diversity enriches and strengthens all communities
- Society equally values, respects, and appreciates the diverse learning styles and achievements of all students
- All participants are empowered to reach their potential, taking into account individual requirements and needs.

Inclusive education is not possible without inclusive teaching.

Inclusive teaching

Inclusive teaching should reduce the need for individual adjustments, because many of the barriers that students may face have been anticipated and removed. It recognises that many of the adjustments made for disabled students could benefit many other students if made available to all. Every student has their own preferences for learning, at different paces and using different methods. Inclusive teaching principles values the diversity and difference in individual learners, and harnesses this to improve the learning experience for every student. The results within MOOC were developed in line with the inclusive teaching practices that tend to give students greater choice and control over their learning, and make fewer assumptions about prior experiences or knowledge.

The basic principles of inclusive teaching are:

- Provide students with a variety of opportunities to demonstrate their learning and knowledge
- Coordinate sources of learning support
- Consider a variety of teaching and learning approaches and methods

The term 'inclusive teaching' is broad-ranging and encompasses various ideas and strategies. Many of the techniques that are widely recognised as good inclusive teaching practice were also used in work of RAPIDe MOOC:

- materials made available to participants in advance so they have time to read and prepare
- group work was encouraged so participants could learn from each other and encounter different perspectives
- there were different opportunities for participants to contribute and demonstrate their learning
- reading lists were provided so that participants could learn from a variety of critical approaches
- aims and expectations were clarified in written and oral form so participants know what they should expect to learn and work towards
- possible differences in participants' prior knowledge were taken into account when teaching and assessment was designed
- teaching content and activities were designed to align with the other modules so that the participants could build on knowledge and skills progressively

- video transcripts were provided to participants.

RAPIDe MOOC designers took care to encourage a sense of belonging in participants through a learning environment and organized events.

9. QUALITY

The development process of RAPIDE MOOC included a quality assurance procedure agreed among partners: after designing the 1st version of the module structure and materials, the module was screened and carefully read by another partner according to the agreed quality review form.
The process was designed in a way to allow the authors the necessary time to implement the final changes and adjustments before piloting.

During the piloting process, the participants were invited to provide feedback to course designers in order to enable further improvements. The feedback information of each module was shared among partners and used in each further module.

The feedback of participants is also reported in the above chapters.

The technical check and support of the modules was done at FOI which supported the MOOC also in technical and administrative issues.

10.   SUSTAINABILITY

Within the last project meetings, the partners discussed the future of RAPIDE MOOC and chose the best mode for its availability for future learners.

Therefore , RAPIDE e-course "Let's flip learning!" was created based on the piloted MOOC as an excellent opportunity for professional development of teachers and educational policy-makers, as well as a chance for unique co-creational experiences beyond the project lifetime: https://rapide-project.eu/en/e-course

It is a research-based short online e-course that includes theoretical introductions to four major topics, best-practice examples and hands-on activities, related to innovative pedagogies and assessment, learning analytics and impact of innovative pedagogies.

Since designed as a self-paced online course, all activities are created to be executed independently in four modules:

Module 1: Let's innovate teaching!

Module 2: Let's innovate assessment!

Module 3: Let's innovate support!

Module 4: Impact analysis of innovative pedagogies.

Upon completion of all mandatory activities participants receive a Certificate of completion.

All the materials available within this e-course have been prepared in line with the Creative Commons licence (CC BY NC SA).

Expected total workload

100 hours

Type

Self-paced online course

Certificate

Certificate on completion

Enrollment

Free access via https://learn.rapide-project.eu/

Further possibilities of use

For more broad institutional use please note that this e-course can be easily performed as mentored online course and some activities can be performed as a group work.