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AMED

4.3. Quality control and evaluation of the study implementation

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EXECUTIVE SUMMARY

The objective of this document is to evaluate the implementation of the Study Programme (SP) and to provide guidelines for improvement on the basis of the analysis of a first run with a total of 48 participants. We start with an overview of the SP and how it was developed and delivered. To this regard, we also focus on the impact that the pandemic had on the SP delivery and the corrective actions that were undertaken to adjust the calendar accordingly.

Then, after introducing the participants' profiles of the pilot, we discuss the analysis conducted after that the SP ended. The analysis is based on online surveys, focus groups and interviews carried out with the participants of the program during its duration. In the end we highlight the strengths of the SP and suggest recommendations for future editions.

THE STUDY PROGRAMME

Overview

One of the main objectives of the AMED project was the co-creation and piloting of a new Study Programme (SP) for professional development focusing on the implementation of blended learning.

The main idea was to contribute to the professional development of MNU academic staff for the transition to a bi-modal university through:

- → The provision of the foundations of e-learning and of different blended learning approaches,
- → The training of lecturers in design, planning and implementation of competency-based blended learning,
- → The training of university decisions makers on blended learning strategic management and action plans.

The design of the SP started with the identification of the training needs (see deliverable 1.3 AMED Needs Analysis). This phase provided the basis for the design and development of a tailored and context-sensitive SP curriculum. For each training need, we identified a set of topics and we assigned it to each SP's module.

The SP consisted of the following 4 modules:

- 1. "Foundations of e-learning" (common module to all stakeholders: decision-makers and lecturers)
- 2. "Leadership and management of e-learning" (MNU's decision-makers)
- 3. "Designing digital learning" (MNU's lecturers)
- 4. "The networked teacher" (MNU's lecturers).

The SP concluded with capstone projects, specific to each profile, and were directly connected to the modules.

The SP was divided into two learning paths. Learning Path 1 was addressed to decision-makers, while learning path 2 was for lecturers.

The decision makers' learning path was made up of 2 modules (M1 and M2) and a capstone project (CP1). The lecturers' learning path had 3 modules (M1, M3, and M4) and a capstone project (CP2).

Study Programme total workload was 100 hours for Decision-makers learning path and 140 hours for Lecturers learning path. The Virtual Learning Environment adopted was Moodle.

Based on the needs analysis, identified CETE capacity to successfully implement the program, and valued different alternatives, a set of design principles was outlined to focus on the viability of the programme:

- General: applying active learning, encouraging autonomy, introducing just-in-time facilitation intervention, and foresee the sustainability and scalability of the programme.
- Hands-on: while familiarising with new concepts, views and practices, participants had to be able to anchor their activities to their current practices and concerns.
- Scaffolded: activities had to be accompanied with guidelines and provided with templates.
- Autonomy and empowerment: the programme combined active participation, self-reflection and regulation, self and peer assessment, and formative feedback.
- Up-to-date: learning resources should have to be the best and most up to date developments on the subjects and should be easily updated.
- Customised: while inspired by different perspectives and practices, local (national) and institutional policies and strategies had to be integrated as part of the modules' study materials. Some of them were developed throughout the course of the project like the e-learning policy and university e-learning roadmap, as well as the new institutional strategic plan.
- Learner-centred and activity driven: focus on learning activities oriented by learning outcomes, aligned with competences, and assigning participants a key role in their own development.
- Sustainable: on one hand, a flexible programme with principles of a core development (emphasis on development of modules and tooling the activities) and the affordable and easy to update/upgrade corpus of knowledge (Wordpress-based handbook); on the other hand, the development of methodological tools supporting activities development, self-reflection and self-assessment, community building and peer review while coherently proposing the transition of the teacher role to that of the facilitator of learning.
- Fully online and asynchronous: the programme modules should be delivered online on an asynchronous basis.
- Cohort based: a group of participants followed a pre-established schedule of activities and interacted with the facilitators and other participants in the virtual environment.

The capstone projects dealt with the development of practices relevant to the participants' job position (lecturers and decision makers) and of solutions oriented towards the adoption of blended learning.



Figure 1. AMED Capstone Projects overview

Capstone Project 1 (CP1) required decision makers to develop a faculty/institutional b-learning implementation action plan.

Capstone Project 2 (CP2) required lecturers to design a blended learning activity/experience blueprint together with a learning facilitation plan and, when possible, the development of a prototype.

With regards to CP1, decision makers had to achieve the following milestones:

- Milestone 1: Formulate an e-learning vision
- **Milestone 2:** Apply an e-learning planning matrix to determine their current stand in relation to elements of e-learning practice
- **Milestone 3:** Plan their actions to improve e-learning implementation at their faculty/institution
- **Milestone 4:** Identify required policies and/or amendments required to current policies to implement their action plan.

The learning outcomes expected were:

- To formulate an e-learning vision for an institution/faculty in relation to elements of an e-learning practice.
- To develop an action plan to implement quality e-learning by identifying current institutional/faculty status in relation to the elements of e-learning practice.

• To examine required policies/procedures for sustainability of e-learning at faculty/institution with the recommendations of necessary amendments.

With regard to CP2, lecturers had to achieve the following milestones:

The first one was the "<u>Activity overview</u>" where they had to explain the macro design of their activity; the second one was the "<u>Micro design</u>", where they detailed each task; the third one was the "<u>Implementation</u>", where they finished to implement their complete and reviewed blended learning activity on the Moodle learning platform and redact the materials and the plan for the F2F part of the activity.

The expected learning outcomes were:

- To develop an outline of a blended syllabus highlighting the balance between synchronous and asynchronous learning.
- To align competencies, learning outcomes, learning methodologies, and assessment in a blended learning activity.
- To design a blended activity based on a meaningful use of Moodle and/or other ICT tools.
- To design formative and summative assessment for blended learning activity.

It is relevant to point out that the **capstone projects** were directly connected to the modules (capstone project 1 one was connected to modules 1 and 2, and capstone project 2 was connected to modules 1, 3 and 4). This meant that the activities and deliverables of the modules were oriented towards a progressive development of the CP. E.g. M3 focused on the design of a blended intervention while M4 added the planning of the facilitation of such intervention. CP was a period to extend and complete a whole intervention ready for implementation.

The pilot

The result of the co-design process led to the creation of the AMED e-Learning SP which was piloted at the Maldives National University between March 2021 and March 2022.

The two groups of participants of the SP were lecturers and decision-makers guided by a group of facilitators.

Participants of the Study Programme				
	Participants when	Participants who	Participants who	Participants who

	the SP started	completed the modules	completed the capstone project	answered the post-survey
Lectures	64	44	44	44
Decision Makers	11	7	7	7

Facilitators of the Study Programme		
Facilitators	10	
Facilitators' coordinators	6	

There were 6 lead-facilitators, one for each module and for each capstone project (4 modules + 2 capstone projects). They were in charge of coordinating a coherent facilitation within each module and across all of them, as well as in charge of facilitation tasks. There were also other 10 facilitators. In addition, there were 2 resource persons, one for the overall SP related matters and the other one for Moodle related issues.

Facilitators were all researchers and/or lecturers at MNU and were trained through a workshop led by UOC previous to the SP delivery. They were assigned the tasks of animating the discussion, moderate learners' participation, clarify doubts, remind learners of deadlines, boost their motivation and engagement and assess the assignments.

Adaptation of the schedule due to COVID-19

The pandemic and the several lock-down periods affected the original planned pilot delivery. Despite the impact of this situation on the development of the AMED project, the piloting started as planned.

However, the situation forced the rescheduling of the SP delivery a few times to accommodate the changing situation. After Maldives' lockdown in May 2021, there was a sudden shift to online teaching at MNU and the majority of the participants were not able to progress as initially planned.

Most of them, because of problems concerning their health or because of private and professional issues caused by COVID-19, were not able to work from home. Similarly, many participants were not able to work at the pre-established programme pace as they had to attend to the growing demands coming from the institution and their regular students.

Facing this reality, the project partners and MNU facilitators, who were carefully and regularly monitoring the situation, proposed a series of measures to make the calendar more flexible and extend the modules periods and deadlines to motivate participants and allow them to accomplish the SP activities.

Despite this advert situation, the pandemic also resulted in a powerful triggering factor and a valuable opportunity to put into practice the conceptual tools provided by the SP and to apply them to their current situation.

METHODOLOGY

In order to assess the implementation of the study programme we used a mixed approach by combining quantitative and qualitative methods. Quantitative part of research enables us to pinpoint the areas that need improvement, and the qualitative part of the research reveals the cause of issues, and possible solutions for the future, updated programme.

Quantitative part of the research:

In this approach we decided to use Kirkpatrick's framework for its simplicity and renown pragmatic use. Moreover, using the Kirkpatrick approach to evaluate the study programs for lecturers and decision makers, will contribute to program improvement, maximise learning to behaviour transfer and demonstrate the study program value. There are four Kirkpatrick levels of evaluation, but in this research we will use only the first two, as Levels 3 and 4 assess changes in behaviour and organisational benefits (those are done 6-8 months after the study programme has ended):

- Level 1 Reaction
- Level 2 Learning
- Level 3 Behaviour change
- Level 4 Organisational results

Each level is described in terms of how it should be measured according to the literature. The **first level** is usually measured with reaction questionnaires which are related to how learners perceive the value of the training, their satisfaction with the training, etc.

For the **second level** it is recommended to use before-and-after questionnaires and/or performance tests to measure the learning achievement from courses.

Therefore we created and administered an online questionnaire to measure the gain in knowledge as well as their satisfaction, engagement and relevance of the SP.

Qualitative part of the research:

To identify the strengths of the SP and the areas of improvement for future editions, semistructured interviews with decision-makers and focus groups with lecturers and facilitators were conducted.

The design of interviews scripts and focus groups protocols, as well as the data analysis, were carried out according to the dimensions presented in the following table and based on the <u>Specific</u> Review Standards from the QM Higher Education Rubric, Sixth Edition.

Dimensions in the evaluation of the SP		
Overview	Progression, consistency, workload, duration, general structure	
Learning Outcomes (LO)	Relevance, consistency and alignment to learning activities (LA)	
Assessment & Feedback	Criteria clearly explained, assessment and skills relation, quality of feedback	
Technology	Level of Satisfaction with Moodle and the available technology	
Learning activities (LA) and Interaction	Relation LA and LO, engaging LA, fostering scaffolding, collaboration and learner autonomy	
Learner support	Teacher support and interaction with teacher	
Capstone Projects (CP)	Its application to current practices and policies	

Data collection and participants

For the **quantitative part of the research**, a total of 47 participants were involved. Online questionnaires were created and administered at the beginning and at the end of each module within SP to measure their gains in knowledge. Final survey was given to participants at the end of the SP to measure their satisfaction, learning gains, engagement and relevance of the SP. 5 participants from the "Decision makers" learning pathway and 43 participants from the "Lecturers" learning pathways were involved in the assessment procedure. This part of research started with the kick-off of the study programme and ended in January 2022. FOI team analysed the data in February 2022.

In the **qualitative part**, four interviews were conducted with MNU decision-makers. They are members of the Quality Department, Deans of Faculty, and members of CETE. Three of the

interviewees took part in the SP, and the other one was considered relevant for having participated in the design and delivery coordination of the SP.

Three focus groups were conducted with five participants each. A total of 10 lecturers participated in two focus groups, and five facilitators in another one. The selection criteria for lecturers were as follows: participation in the SP, participants from different departments and areas of expertise, and teaching at the undergraduate and graduate levels. Concerning facilitators, almost all of them were members of CETE (Centre of Excellence for Technology Education).

During January and February of 2022, the UOC team collected, transcribed, and analysed the data.

ANALYSIS

Decision-makers (N=7)

Quantitative data:





Figure 2. Gender - Decision makers

Figure 3. Time in position at the University - Decision makers





Figure 4. How would you rate the quality of the Internet connection you used to access the study program? Decision makers

Figure 5. The device I used the most to follow the study program was. Decision makers



Figure 6. When I have a chance, I attend online training programs (workshop, webinar, short courses) related to online learning and teaching. Decision makers

Satisfaction (N=7)		





4. Overall, I enjoyed studying this program.



2. Overall, I would recommend this study program to other colleagues.



5. Overall, I was satisfied with the study program materials provided.



3. Overall, this study program met my expectations.



6. Overall, I was satisfied with the delivery method of different study program materials and learning activities.



9. I was satisfied with the support provided by my



8. Overall, I was able to keep up with the

workload on this study program.





7. Overall, I was satisfied with the assessment during this study program.



10. I was satisfied with the available peer-topeer communication.



11. I was satisfied with the Learning Management System (Moodle) used in this study program.



Figure 7. Decision makers - Satisfaction

Engagement (N=7)

12. I logged into the study program regularly (at least once per week).



14. I applied the study program materials to my life.



16. I engaged in online conversations with other participants regarding the study program.



18. My results on tests were in line with my expected results.



13. I carefully read the study program materials.

.....



15. I was extremely motivated to learn the study program content.



17. I contacted the facilitator when I did not understand study program materials.



19. I was confident that I could do well in this study program.



Figure 8. Decision makers - Engagement

Relevance (N=7) 21. Overall, this study program contributed 20. The content of the modules in this 22. Overall, I find this study program to be relevant for to the achievement of my personal study program was up-to-date. development aim. my work. 80% 60% 80% 20% 20% 20% 20% Strongly Strongly Disagree Disagree Agree Strongly Disagree Agree Strongly Agree Strongly Disagree Disagree Strongly Agree Disagree Agree Agree



1. What barriers do you think you will face when implementing e-learning?





.....



Figure 10. Decision makers general expectations; Qualitative analysis in ATLAS.ti

MODULE 1: Foundations of e-learning (N=7)



Figure 11. Decision makers MODULE 1: Foundations of e-learning

MODULE 2: Leadership and management of e-learning (N=7)



Figure 12. Decision makers MODULE 2: Leadership and management of e-learning



Figure 13. Decision makers CAPSTONE PROJECT 1

The results of the analysis of the decision-makers' interviews are presented as follows.

Overview of the Study Programme. Decision-makers evaluated the SP positively, underlying aspects such as structure, content, and progression. The post-survey results also reflect that most decision-makers were satisfied with the quality of the study program, the material provided and that it met their expectations (60% agree; 40% strongly agree).

- *Structure*: The overall design of the SP was well-valued. The participants considered that the availability of information about competencies, learning outcomes, learning activities, and assessment criteria let them work autonomously.
- *Duration*: Decision-makers estimate the duration of the SP adequate. However, they acknowledge the challenge of balancing their professional obligations with the SP demands.
- Progression: The progression of the modules was perceived as appropriate, allowing them
 to go from inception into theoretical foundations to their application through specific tasks
 and the Capstone Project. They were satisfied with the gradual explanation and unfolding
 of the different parts of the programme, fostering learner autonomy and broadening their
 understanding of blended learning in higher education. In addition, the programme's
 flexibility was taken as an advantage to proceed at their own pace.
- *Content*: It was considered relevant to the context of MNU as an emerging university in terms of blended learning integration. Some of the participants commented how important to comprehend what blended learning is to overcome the resistance and skepticism to new teaching and learning models.
- Learning materials and workload: The reading resources were considered relevant and coherent with the learning activities. However, according to some of the decision-makers,

there are excessive resources. Participants proposed selecting compulsory reading material and reducing their number to a relevant minimum. Also, they suggest providing optional readings with clues guiding the participant in their selection.

 Suggestions: Decision-makers concurred that some synchronous sessions -online or face-to-face moments- could benefit the learning process. Even though the participants worked autonomously and self-organized in groups to discuss readings and solve doubts, they considered that interaction and collaboration sessions should be integrated.

Learning outcomes. Decision-makers found that learning outcomes were clear and aligned with learning activities. Moreover, the participants felt that learning outcomes guided their achievements and were relevant to their professional practice.

Learning activities. Learning activities were meaningful for participants as they are related to their teaching practices and future intentions of the blended learning application.

Assessment activities. The assessment activities, such as self-assessment, quizzes, and peerreview, were perceived as relevant as they prompted reflection and stimulated critical skills.

Peer review. The participants manifested that peer-review was helpful and proposed that it remains part of the SP. However, the participants need to receive additional training to ensure their readiness to perform the activity.

Technology. Participants perceived their experience in Moodle as positive. Similarly, they valued other tools for interactions, such as Viber and Google Meet, that were part of how they self-organised their study with others.

Support. Participants pointed out that they felt guided through the learning process thanks to the facilitators but also due to the clear programme information, structure, and alignment of all components within each module. All of this allowed them to progress independently and enhance their self-regulation skills. Although the role played by facilitators was crucial, and their feedback was sufficient and useful, decision-makers considered that the facilitation process could be improved (see later improvements in interaction).

Capstone projects. Decision-makers perceived the capstone project as an activity integrated with previous modules: "*I could see how the different components connected and then you know there is a purpose at the end*". It should be noted that this connection between modules and the CP was not always clear for everybody. For this reason, the next edition should provide more information and orientation and clearly and more explicitly define how these different sections are connected.

Lecturers (N=44)

Quantitative data:



Figure 14. Gender



Figure 15. Education level



Figure 16. Teaching experience



Figure 18. Quality of the Internet Connection.



Figure 17. Teaching modality



Figure 19. The device I used the most to follow the study program was.



Figure 20. When I have a chance, I attend online training programs (workshop, webinar, short courses) related to online learning and teaching.

Satisfaction – Lecturers (N = 44)



4. Overall, I enjoyed studying this program.



7. Overall, I was satisfied with the assessment during this study program.



Overall, I would recommend this study program to other colleagues.

program to other colleagues.



5. Overall, I was satisfied with the study program materials provided.



8. Overall, I was able to keep up with the

23%

Disagree

16%

Strongly

Disagree

workload on this study program.



 26%
 9%

 7%
 9%

 Strongly
 Disagree
 Agree

 Strongly
 Agree
 Strongly

3. Overall, this study program met my expectations.

58%

6. Overall, I was satisfied with the delivery method of different study program materials and learning activities.



9. I was satisfied with the support provided by my facilitator.



10. I was satisfied with the available peer-topeer communication.



11. I was satisfied with the Learning Management System (Moodle) used in this study program.

Agree

5%

Strongly

Agree



Figure 21. Lecturers - Satisfaction



12. I logged into the study program regularly (at least once per week).

14. I applied the study program materials to my life.



16. I engaged in online conversations with other participants regarding the study program.



18. My results on tests were in line with my expected results.







15. I was extremely motivated to learn the study program content.



 I contacted the facilitator when I did not understand study program materials.

navenuis.



19. I was confident that I could do well in this study program.





REACTION: Relevance - Lecturers (N = 44)



Figure 23. Lecturers - Relevance



Figure 24. Lecturers general expectations; Qualitative analysis in ATLAS.ti







Figure 26. Lecturers MODULE 3: Designing digital learning



Figure 27. Lecturers MODULE 4: The networked teacher

CAPSTONE PROJECT 2 – Lecturers (N = 44)



Figure 28. Lecturers CAPSTONE PROJECT 2

We present below the results of the analysis of the two focus groups with 10 lecturers.

Overview of the Study Programme. Lecturers valued the SP as a positive experience. They increased their knowledge about blended learning design and implementation, introducing specific changes in their teaching practices. Moreover, they shared that the programme was crucial to help them face the teaching challenges that the COVID-19 pandemic entailed. They highlighted features of the programme that they would keep for other editions, such as structure, duration, and flexibility.

- *Structure*: lecturers concurred that the structure was clear and helped them gain a better understanding of what was expected to do in terms of activities and learning outcomes.
- *Duration*: lecturers agreed with decision-makers that time was sufficient, but there could be tensions with their regular teaching responsibilities.
- *Progression*: Participants considered the modules' progression adequate, particularly task distribution and sequence. Elements such as flexibility and connection between modules and capstone projects were positively valued and coherent.
- *Content*: Lecturers stated that the content was interesting and useful. Most of them agreed that the content was new to them as they didn't come from an educational-related career or background.
- Learning materials and workload: Participants were satisfied with the materials provided (69.8% agree; 20.9% strongly agree), especially videos and reading resources. They found them relevant and applicable to their professional practice. However, some participants perceived the reading material excessive, asking for a more detailed curation.

Suggestions: In order to improve the programme, lecturers suggested the following three actions: 1) Differentiate compulsory readings and co-readings as optional ones. Keeping two or three readings per week. 2) Because of the investment of time, the programme should be certified. 3). Peer support was valuable to understand activities, readings and to submit tasks, so more interaction and synchronous sessions should be beneficial.

Learning outcomes. According to participants, learning outcomes were clear, consistent, and helpful to understand how blended learning works.

Learning activities. Lecturers agreed that the learning activities promoted the achievement of the learning outcomes and were relevant, engaging, and useful. Some of them emphasised the usefulness of the forum in terms of asynchronous interaction and stimulation of reflection.

Assessment activities. Lecturers mentioned that the assessment criteria provided in rubrics helped them complete the activities. Also, quizzes played an important role because they allowed participants to track their progress.

Peer-review. They valued the importance of peer review and found it relevant to their learning progress. Some participants experienced technical issues regarding Moodle in this activity. Some others suggested that not all the participants had a clear understanding of how to provide good feedback.

Technology. Participants were satisfied with Moodle and some of them had previously used it. The support system (facilitators and technical support) allowed them to explore new features and address technical issues.

Learner support. Lecturers appreciated the guidance and support offered by facilitators. Also, the suggestions and examples provided in templates and other methodological instruments were beneficial for their learning processes. However, they pointed out that more guidance is needed. They suggested that some synchronous meetings would be helpful before task completion or at the beginning of the modules. Peer-support and self-organised study groups emerged as a strategy to discuss and clarify ideas among participants.

Capstone projects. Lecturers explained that the capstone project was stimulating and rewarding, although not for that less challenging. In general, lecturers have found different strategies to introduce blended techniques in their courses and change the focus from a teacher-led approach to a student-centred one.

Facilitators

The following are the results of the analysis of a focus group with 5 facilitators and facilitators' coordinators.

Overview of the Study Programme. Facilitators expressed that the SP was an enlightening learning and collaborative experience. Also, it offered new perspectives on blended learning and helped participants develop critical skills and improve their teaching practices during the COVID-19 pandemic. From their perspective, the SP increased the acceptance of e-learning among the MNU community.

- *Structure*: Facilitators considered that the SP as a fully online learning programme worked well considering that it was a new experience for most of the participants. However, they consider the option of implementing a blended approach with some synchronous sessions.
- *Duration*: The duration of modules and the programme is convenient, but the number of readings and some tasks should be revised and adjusted better to the 25h estimated workload in each module.
- *Workload*: Facilitators identified that the workload was considerable, especially in module 1, affecting the participants' motivation.
- Suggestions: The facilitators agreed that some synchronous (online or face-to-face sessions) could be beneficial in terms of motivation, gaining deeper knowledge, and supporting group cohesion.

Learning outcomes. The facilitators mentioned that the learning outcomes were clear, and the activities and learning resources guided their achievement.

Learning activities. The learning activities were aligned with the competencies and the learning outcomes. However, they suggested improving the *Critical Friend* activity, providing more guidance and examples.

Assessment activities. Facilitators concurred with the alignment between learning outcomes and assessment activities. Facilitators guided participants, and the learning pathways were clear to everyone. Assessment tasks were helpful, especially with the examples and the templates provided.

Peer-review. They valued the peer-review process and recognized that, even though most of the participants were unfamiliar with it, peer-review should be implemented in future editions of the SP. However, participants should receive previous training on the activity. They also pointed out the importance of peer feedback provision based on similar participants' backgrounds/disciplines.

Technology. Moodle was positively valued. The fact that the participants had taken some previous training on Moodle features, their familiarity with the technology was an advantage for the programme implementation.

Learner support. The most demanded support was specific help regarding concrete aspects of a task, looking for clarification, more explanation, or examples. They perceived having an important

role in motivation. They used different strategies and tools to answer questions (face-to-face appointments, groups in a social platform, Viber group, and phone calls). Facilitators coordinated themselves to support participants. They had frequent group meetings or one-to-one meetings according to their needs. Facilitators appreciated the training they received and suggested having additional training sessions for each module. Some of them also commented that it could be beneficial to meet with the modules' designers previous to the beginning of their delivery to clarify doubts and solve issues.

Capstone projects. Facilitators maintained that capstone projects fostered reflection and allowed participants to *bring in all together*. The capstone projects have a significant potential impact on implementing blended learning at MNU.

STRENGTHS OF THE STUDY PROGRAMME

The interviews and focus groups with different participants of the SP provided rich information regarding the design decisions that guided the first version of the programme, as well as insights and concrete recommendations for improvement.

Below, we present a list of positive aspects that were highly valued by the different profiles of participants and the facilitators.

• Modules' sequence and duration

The participants reported that the order of the modules was logically sequenced and that their duration was adequate.

Relevant competencies and clear learning outcomes
 Competencies and learning outcomes were clearly stated and consistent.

• Relevant learning activities and learning resources

Learning activities were meaningful and aligned with learning outcomes. They appreciated the guidelines and templates that supported their work all along the learning process. The hands-on activities allowed participants to familiarise themselves with new concepts and tools and to apply them to their daily teaching practices. Learning resources such as readings and videos were in general evaluated positively.

• Balanced and significant integration of different types of assessment of and for learning

The combination of self-, peer, and teacher assessment allowed the participants to acknowledge what they have learnt and fostered critical thinking. They were perceived as coherent with the learning sequences, supporting their development.

• Moodle as a learning platform and as a support for learning and assessment activities

The participants perceived Moodle LMS as user-friendly, and the course structure and navigation supportive of their learning process.

• Facilitators timely interventions

Facilitators played a very important role throughout the whole SP and they provided timely and sufficient feedback. In general, the participants expressed that the facilitators' interventions were useful, adequate, and meaningful.

• Facilitators coordination

Facilitators were organised in a team and all of them had a reference leader. Their coordination through key meetings (at the beginning of each module and on-demand) and the way they distributed tasks among themselves had a remarkable positive effect on the whole course.

We may conclude that the SP promoted active learning and participant autonomy. The activities prompted self-reflection and the development of critical skills and meta-cognitive skills. It also fostered participants' empowerment, particularly regarding their capstone projects.

GUIDELINES FOR IMPROVEMENTS

Improvements

The rich account that was documented through the diverse profiles of lecturers having participated in the interviews and focus groups provided detailed information regarding areas of improvement of the SP. In this section, we outline a set of specific and practical guidelines to improve the SP for future editions. These guidelines cover several categories, as follows:

Learning resources

 Balance out the number of readings: As has been mentioned before, the study workload needs some adjustments. Learning resources should be classified into two main categories, such as "key readings" (KR) and complementary readings or "to learn more" readings (TLM). KR are learning resources that are crucial for task development and required for assessment. TLM readings are optional learning resources recommended to gain more in-depth knowledge on the topics presented.

Methodological instruments

- **Templates**: The templates for blended learning design and planning can be improved and enriched with new features. Templates with more detail about how to design for classroom, online synchronous, and asynchronous learning would be greatly appreciated. These are some examples:
 - Oregon State University. Blended Course Planning Forms
 - University of Texas. Hybrid/Blended Course Template
 - <u>University of Waterloo. Blended course design template. Examples of Blended</u> <u>Courses</u>

Content

Introducing the notion of Emergency Remote Teaching (ERT): The SP was thought
of as a gradual introduction to technology adoption for teaching and learning. Because of
the COVID-19 outbreak, the participants (lecturers in particular) were forced to rapidly
introduce and use technology in their courses. They had to cope with the successive
lockdowns constraints without proper training and well-established technology
infrastructure. As a consequence, some lecturers became reluctant to adopt technology
in education. In addition, they started considering their practice in ERT as equal to blended
learning. To overcome this misinterpretation, a solution would be to introduce the notion
of ERT in module 1 and discuss its difference with online learning and blended Learning.
This can be done through the creation of a synchronous session for discussion among
participants and facilitators in module 1 (see also Interaction).

Some of the following resources could be used to stimulate the discussion:

- <u>One year later... and counting: reflections on Emergency Remote Teaching and</u> <u>Online Learning.</u>
- The difference between Emergency Remote Teaching and Online Learning.
- <u>Understanding pandemic pedagogy: differences between Emergency Remote,</u> <u>Remote, and Online Teaching</u>.
- <u>That's NOT Online Learning! The difference between Emergency Remote</u> <u>Teaching and Online Learning.</u>
- Reinforcing the application of the e-learning roadmap. This key document should be better integrated into the SP. It can be part of a discussion to raise awareness of the institutional strategy for blended learning for all staff. It can also be better integrated within the capstone project and how this CP aligns with the roadmap and contribute to the development of blended learning in accordance with the priorities of the university. It bears mentioning that the roadmap was under development at the moment of the SP design and it was completed while its delivery. The final validated document will certainly enrich the experience and help focus the participants efforts.
- **Connection among modules**: The analysis suggested that participants identified continuity between the previous modules and the capstone project. However, this relationship should be more explicitly developed and presented since the beginning of the programme. Proposed draft text to be added:

The SP is composed of a set of articulated modules that go from an emphasis on the conceptual basis of blended learning to rapidly focus on practical tasks and applications.

M1 presents the concept of blended learning, explores a set of dimensions affecting its adoption and implementation, and fosters discussion on the particularities and differences regarding other modalities.

LECTURERS

Having familiarised with blended learning in M1, it is time to start applying the main concepts and principles to the design and implementation of a blended solution of the lecturers' choice. This is a guided process that involves M3 (design) and M4 (teaching planning) and, the Capstone project (final product).

M3 focuses on designing a blended learning experience and provides concepts and structure to support pedagogical and technological decisions. The blended scenario is a first draft of a design solution (course, learning sequence, activity, workshop, lab, etc.) intended to be implemented by the lecturer.

M4 approaches the designed blended scenario in M3 by focusing on planning the teacher interventions, the communication and interaction with and among students. Again, this is a draft that complements and further advances the blueprint.

CP2 starts by revising M3 and M4 productions and further developing the blended scenario in much more detail: selecting learning materials, developing guidelines, developing content, selecting tools supporting activities, deciding on tools and navigation in the LMS (Moodle), and outlining a mock-up or presenting a prototype in Moodle. The intention of the capstone project is to allow the lecturer to end the programme with a functional solution that can be rapidly and easily implemented for delivery in a short period of time.

DECISION MAKERS

Having familiarised with blended learning in M1, it is time to explore and deepen your knowledge on the strategic and operational aspects that sustain a successful implementation of this modality.

M2 focuses on blended learning in regards to the institutional vision, mission and main strategies, and considers its adoption as a significant component of the educational model. It provides clues on how to transform the institution into a bi-modal university.

CP provides instruments and guidelines on how to develop a project in alignment with the university e-learning roadmap. It focuses on projects that heads and senior managers in different hierarchical positions may develop to advance the blended learning agenda.

- Instructional strategies of Blended Learning: How to implement synchronous online sessions in blended learning, how face-to-face and online activities are connected, different types of online activities, etc. (see also *Templates*) can be further developed for the lecturers' pathway for lecturers.
 - Use the Balanced design planning tool developed by FOI
 - Introduce resources about active online teaching and learning like these webinars (note: the technology is not the focus, it is the pedagogical strategy):
 - <u>How to Create Active and Engaging Learning Experiences with Zoom</u> <u>Breakout Rooms</u>

- How to Use Zoom in the New (Blended) Normal: Models for Student Inclusion and Engagement
- How to Use Moodle to Teach Online
- How to Use Moodle for Effective and Authentic Assessment
- How to Teach Online Effectively Using Zoom
- Introduce ressources about flipped classroom

Peer-review

The peer-review was originally a flexible task but with a fixed deadline schedule in the capstone project process. The peer-review activity demanded coordination within a short period, where the participants should converge. The pandemic forced to increase the level of flexibility of the SP and to postpone deadlines three times. This situation made the participants progress at a different pace, affecting the expected implementation of the peer-review. It bears mentioning here the effort of the facilitators and coordination of the pilot to make this activity possible.

The suggestion is to keep the peer-review activity as it is positively valued by the participants, considering that future implementations of the SP should not be affected by the extraordinary circumstances experienced during its first run.

Here are some possible suggestions for improving the SP:

- To provide training to the SP participants (decision-makers and lecturers) regarding what peer-review is and how to apply it, focusing on how it promotes reflection and benefits to their learning process, and how to give and receive feedback.
- To provide learning materials regarding peer-review (research articles, case studies, and concrete examples).
- To offer a synchronous session (online or face-to-face) for discussion among participants and the facilitator/s about peer-review.
- To assign peers from similar knowledge areas, if possible.
- To create a final (synchronous online or face-to-face) session to present the capstone projects.

Assessment

Pre & post-tests: Keep knowledge-focused pre and post-tests as part of the modules' assessment for learning strategy. Also, add a final task focusing on reflecting on the results of pre and post-tests. It would improve learners' critical thinking and meta-reflection skills on their performance.

Interaction

The main design SP principles were supporting self-regulation and learner autonomy. This decision was taken based on CETE (Centre of Excellence for Technology Education) at the time capacity and available resources to assist a considerable number of academic staff. The modules had comprehensive presentations, extensive descriptions, online tools, resources, and templates to scaffold and support autonomous learning.

The data analysis revealed the need for more synchronous interaction. The fact that the university is in a transition phase towards a significant adoption of blended learning, that face-to-face and synchronous practices are prevalent, and that there is a "cultural trait" (as mentioned in the interviews and focus groups) that appreciate this interaction, we propose to create the conditions for meaningful sessions and increased cooperation/collaboration, either, online or face-to-face, for example:

- Module 1: session focused on a discussion about the differences between emergency remote teaching, online learning, and blended learning (see also "Content"). We develop further this session as an example for others:
 - Create a task of guided/active reading on BL and ERT (see content)
 - Create a bigbluebutton session for discussion
 - Start the synchronous session with a set of questions exploring the participants' opinions (e.g. Mentimeter)
 - Start discussion based on the answers
 - Split participants in groups (breakout rooms) and assign specific topics (on BL, on ERT, on lived experiences, etc.) and ask to write on a shared digital board (e.g. Padlet) about the differences between BL and ERT, benefits, misconceptions, etc. (column display)
 - Wrap-up session based on the digital board and the implications of the discussion to the current teaching practice with technologies and intentions for the future.
- Modules 2, 3, 4: sessions for group or individual tutorship.
- Capstone project: Session focused on a discussion and orientation about the peer-review activity (see also "Peer-review"). For decision-makers, the session could focus on topic selection and its applicability to the vision and mission of the University, Faculty, or area of expertise, considering blended learning policy and roadmap. In the case of lecturers, the session could highlight the innovations they want to introduce in their courses, possible benefits for lecturers and students (accessibility, improvement of learners' reflection skills, collaboration, etc.), and any other issues they need to tackle.
- Capstone project presentation: A final session to present the projects and exchange.
- Self-organised participants' sessions: provide a videoconference tool to facilitate communication among the participants.

Technology

Although the support to the use of technology (specific functionalities of the platform) was timely and sufficient, this assistance can be improved further by:

- Providing links to Moodle tutorials and more technical information as an alternative and complementary resource.
- Adding to the platform other tools that help organize synchronous sessions among participants (see "interaction").

Flexible pathways

According to the participants' previous experience with blended and online learning, we recommend two different pathways to increase academic staff participation in the SP:

- A pathway addressed to participants who have previous experience and knowledge in online and blended learning that can go through the programme based on their specific needs. The programme could be adapted to the more experienced participants, so they can skip the foundational module, for example. In order to achieve that, a pre-test (at the beginning of the study programme learning path) needs to be created to assess all learning objectives of the study programme. Participants are shown only those resources of the study modules that refer to the learning objectives they failed to achieve in the pretest. Capstone project however, is mandatory and cannot be skipped. Conditional activities are used for this purpose in Moodle LMS. A specific resource is shown or hidden from participants depending on their answer to the related question from the pre-test.
- A pathway addressed to beginners, as it was implemented.

Certification of the Study Programme

Given the importance of the SP and the fact that it demands a considerable investment of time, it should be formally recognized and integrated into the staff development programme or strategy.

Pilot results and strategies for sustainability

The process of accreditation of the AMED SP within MNU (see D5.2 AMED Sustainability Plan) is considered a key action for sustainability, ensuring long-term benefits regarding academic staff readiness for blended learning implementation and widespread adoption.

MNU should continue working on reinforcing the integration of the institutional policy and strategies as part of the modules' learning activities. The e-learning roadmap and the strategic plan are key learning resources that should guide SP participants in the development of solutions towards quality blended learning. These developments, particularly through the capstone projects, will contribute to the proposal of specific actions from different university stakeholders, all oriented towards the transformation of MNU into a bi-modal university.

MNU should also put the efforts towards the development of SP pathways accomodating to different academic staff backgrounds, offering more flexibility and increased opportunities for participation. At the same time, the modular approach may also serve as the basis for the development of other related programmes, reusing and adapting the AMED SP for other purposes, for instance, those mentioned in the Sustainability Plan: the adaptation a subject/unit in the undergraduate level teacher education programmes, the upscaling to a Masters level teacher education programme, the orientation towards a professional development programme for MNU community but also the Maldives education community at large.