



Teacher training with specialization on life and information
technology skills

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INTRODUCTION

Bridging the gap between current education and the demands of the 21st century, the 21st TS project empowers teachers with the skills to create dynamic and engaging learning environments. This Programme Delivery Final Evaluation Report (D4.5), provides a comprehensive assessment of the two educational programmes developed and delivered under the project:

- **Educational Programme:** A four-module curriculum designed for both pre-service and in-service teachers, focusing on key 21st-century skills.
- **Capacity Building Programme:** A two-module programme equipping academic staff with the knowledge and skills to effectively deliver the Educational Programme.

Drawing on comprehensive data, this report consolidates the insights gathered through all the questionnaires completed by both students and teachers, providing direct feedback on programme content, delivery, and effectiveness. Additionally, the evaluation reports, included in D4.3 Programme Delivery Interim Evaluation Report, summarizing the questionnaire findings and analyzing the data collected for each Module is the foundation for creating this report. This approach ensures a comprehensive understanding of the program's impact, capturing the perspectives of both participants and those directly involved in its execution, ultimately leading to more informed and effective improvements for future iterations.

Overall, this evaluation report serves as a valuable resource for stakeholders involved in teacher education and development. By offering insights into successful approaches and potential improvements, this report informs future initiatives and equips teachers with the tools they need to cultivate 21st-century skills in their students. It aims to:

- **Analyze the delivery of both programmes:** Examining student learning experiences, teacher engagement, and the effectiveness of teaching methods and materials.
- **Identify successes and challenges:** Highlighting areas where the programmes have met their objectives and areas where improvements can be made.
- **Formulate recommendations for future iterations:** Providing actionable suggestions to enhance future programme delivery, content, and impact.

1 EVALUATION PROCESS

1.1 Individual Module Evaluation

Regarding the evaluation process, this is a multi-dimensional approach to ensure a comprehensive understanding of each module's effectiveness. Thus, each module within the programmes undergoes a comprehensive evaluation process focusing on several crucial areas:

- 1. Course Materials:** This section dissects the quality, relevance, and workload of the provided learning materials, including readings, videos, and activities. We'll assess their alignment with module objectives and their effectiveness in fostering student engagement and understanding.
- 2. Teaching Conditions:** This section examines the teaching methods, the online platform, the accessibility of the materials, and the overall learning environment created by the teachers.
- 3. Student Feedback:** This section analyzes student perceptions and experiences through the delivery of the programmes. We'll assess their satisfaction with the module content, teaching methods, and overall learning experience, identifying areas for improvement based on their insights.
- 4. Teacher Feedback:** This section explores the perspectives of teachers who delivered the modules. We'll gather their feedback on the content, teaching methods, student engagement, and any challenges they encountered. This combined with student feedback provides a holistic understanding of the module's effectiveness.

Having evaluated in-depth the delivery of each module, the evaluation then focuses on uncovering strengths and identifying areas of improvements in order for the consortium to formulate practical recommendations:

- 1. Strengths and Successes:** This section highlights the positive aspects of the module, identifying areas where it effectively achieved its goals and contributed to student learning. Overall, successes will be used as benchmarks for future improvements.
- 2. Areas of Improvement:** This section identifies areas where the module could be enhanced based on the data and feedback collected. Overall, challenges and opportunities for improvement will be analyzed, providing specific and actionable recommendations.
- 3. Recommendations:** This section culminates in a set of clear and actionable recommendations for improving the module's content, delivery, assessment, and overall

learning experience. These recommendations will guide future iterations of the program, ensuring it remains effective and impactful.

1.2 Online Platform Evaluation

Beyond the individual module evaluation, the online platform itself undergoes its own comprehensive assessment. Feedback regarding its operability, accessibility, and user-friendliness is gathered from both students and teachers. This ensures that the platform effectively supported programme delivery, and fostered a seamless learning experience for all participants, in order to identify areas for potential improvement to optimize future iterations of the program.

1.3 Questionnaires answered

As shown in Table 1-1, despite facing unforeseen disruptions and delays due to unforeseen challenges, the two programmes reached impressive participation with over 900 individuals engaging and nearly 600 completing questionnaires. This remarkable turnout speaks volumes about the programmes' relevance and ability to resonate with a broad audience. It demonstrates the strong commitment and hard work of all partners and the project's success in attracting and engaging participants despite the challenges encountered.

This high level of engagement highlights the valuable skills and knowledge offered by the programmes, paving the way for continued positive impact in the educational landscape.

Table 1-1. Summary of participation in the Programmes

Module	ECTS	Duration	No of students	No of Q/N answered	No of teachers	No Q/N answered	Overall Average Scoring
EDUCATIONAL PROGRAMME							
MODULE 1	10	6 months	371	224	12	6	4.4
MODULE 2	10	6 months	175	59	6	4	4.6
MODULE 3	10	6 months	102	58	8	3	4.6
MODULE 4	10	6 months	150	109	25	22	4.4
TOTAL			798	450	51	35	4.5
CAPACITY BUILDING PROGRAMME							
MODULE 1	N/A	8 hours	65	65	N/A	N/A	4.4
MODULE 2	N/A	6 hours	63	63	N/A	N/A	4.4
TOTAL			128	128	N/A	N/A	4.4

2 EVALUATION OF THE EDUCATIONAL PROGRAMME

The Educational Programme consists of four modules offered by the universities of the consortium and is designed for both pre-service and in-service teachers. Pre-service refers to students enrolled in a bachelor's programme related to teaching, while in-service denotes active teachers and teachers. Pre-service participants are required to complete all four modules, while in-service participants can choose to complete two to four modules:

- Module 1 (10ECTS): Teaching critical thinking and collaborative problem-solving skills
- Module 2 (10ECTS): Education Technology skills (based on the Technological Pedagogical Content Knowledge)
- Module 3 (10ECTS): Authentic learning tasks - practical implementation of the skills in the classroom
- Module 4 (10ECTS): Optimizing Assessment for 21st century skills

All programme modules were successfully developed as MOOCs, incorporating engaging elements like videos, PowerPoints, interactive activities, relevant literature material, and quizzes. This not only allowed for flexible and accessible learning, but also facilitated multilingual delivery as the materials were translated into all project languages. This inclusive approach promotes greater participation and knowledge dissemination, maximizing the program's reach and impact within the multilingual project network.

2.1 Module 1

This module is designed for pre-service or in-service teachers to make them equipped and skilled in utilizing critical thinking skills and collaborative problem-solving skills for students in whichever subject they teach at secondary or higher secondary education. All units are integrated and linked to soft skills, emotional intelligence, mindfulness, empathy and life skills.

Critical thinking skills improves problem solving abilities and decision making, increases creativity and values, improves organizational ability, saves time through structured thinking process, creates the ability to evaluate resources, acts as protective device against uncertainty, provides the capability to interconnect several disciplines involved to understand the length and breadth of problem/subject at hand and making logical deductions to resolve.

Collaborative Problem-Solving involves collaboration among group members to discuss common challenges, sharing perspectives, identifying issues, weighing options, developing standards and reaching an agreement. The members of the group gather information, share ideas and

perspectives, analyze and synthesize information and ideas and come about with common solutions developing social and cognitive skills.

There is a huge gap in implementing and incorporating 21st Century Teaching Skills in developing countries especially using the critical thinking skills and collaborative problem-solving skills in educational institutions. Even if the teachers know about it, there is no structured manner in which these skills are utilized. These skills most often do not figure in curriculum and there are no specific guidelines for their assessment and evaluation. The principal aim of this course is to bridge this gap and empower teachers to use critical thinking skills and collaborative problem-solving skills in any discipline or subject that they teach. The module consists of the following units:

- Unit 1 - 21st Century Skills
- Unit 2 - Critical Thinking-Concept, Characteristics and Elements
- Unit 3 - Process of Critical Thinking
- Unit 4 - Strategies to develop Critical Thinking Skills
- Unit 5- Methods and Tools to develop Critical Thinking Skills
- Unit 6 - Role of a Teacher to promote Critical Thinking Skills
- Unit 7- Assessment of Critical Thinking Skills
- Unit 8 - Suggested activities for Critical Thinking Skills
- Unit 9 - Collaborative Problem-Solving Skills -Concept, Characteristics and Elements
- Unit 10 - Methods and Tools to develop Collaborative Problem-Solving Skills
- Unit 11 - Role of a Teacher to promote Collaborative Problem-Solving Skills
- Unit 12 - Assessing student's Collaborative Problem-Solving Skills
- Unit 13 - Suggested Activities for Collaborative Problem-Solving Skills

2.1.1 Course Materials

Both students and teachers found the workload manageable in Module 1 (average rating 4.04). While the module structure and evaluation methods were well-received (average rating above 4.1), both groups identified room for improvement in the clarity of learning outcomes (average rating 4.13). Both students and teachers considered the courses interesting and effective in developing critical thinking (average rating above 4.2). Notably, both groups agreed the module contributed to understanding 21st-century digital skills (average rating 4.3). Looking deeper into study materials, both stakeholders found them adequate overall (average rating 4.25) but suggested room for enhancement.

2.1.2 Teaching Conditions

In Module 1, both students and teachers found the online platform to be generally user-friendly and easy to navigate, with average ratings of 4.09. Finding and accessing course materials received slightly lower ratings, averaging 4.05. While the platform's visual appeal received an average rating of 4.02, both groups reported minimal technical issues (average rating of 3.96). Overall, both students and teachers perceived the platform as effectively supporting their learning experiences, with an average rating of 4.22.

2.1.3 Student Feedback

Majority of respondents appreciated various aspects of the module such as the clarity of learning outcome, the quality of study materials, evaluation methods, and structure of module.

Most participants/ students found the course to be interesting which also improved the understanding of 21st Century Skills and enhanced Critical thinking capabilities.

2.1.4 Teachers Feedback

Teachers valued the project's platform for its ability to connect them with large groups of students and fellow trainees, highlighting the logic and coherence of the knowledge presented and appreciating the accessible yet continuous evaluation process. However, they suggested improvements in platform stability to avoid downtime and called for enhanced use of technology to promote critical thinking in their teaching.

2.1.5 Strength and Successes

- **Engaging and Effective Learning:** Both students and teachers found the courses interesting and valuable in developing critical thinking skills. This indicates a stimulating and effective learning environment that fostered critical analysis and problem-solving abilities.
- **Critical thinking and collaborative problem-solving abilities** were demonstrably improved, indicating the effectiveness of the module in developing these crucial skills.
- **Significant Improvement in 21st-Century Skills:** Both students and teachers reported a notable increase in their understanding of 21st-century digital skills. This highlights the

module's success in equipping participants with essential skills for the modern digital world.

- **Well-Structured and Manageable:** The module structure and evaluation methods were well-received by both groups, and the workload was considered manageable. This suggests a clear, organized learning experience that balanced challenge with accessibility.

2.1.6 Areas of Improvement

- **Clarity of Learning Outcomes:** Both students and teachers felt improvement was needed in clarity of learning outcomes.
- **Accessibility of Course Materials:** Finding and accessing course materials received lower ratings than navigation.
- **Platform Stability:** Teachers suggested improvements in platform stability to avoid downtime.

2.1.7 Recommendations

- **Emphasize on engaging and effective learning:** Develop a stimulating environment that fosters critical analysis and problem-solving skills. This can be achieved through interactive activities, real-world applications, and collaborative learning opportunities.
- **Focus on developing 21st-century skills:** Integrate relevant tools and technologies into the curriculum to equip participants with essential digital skills needed for today's world.
- **Ensure clear and well-structured learning:** Develop a well-received structure and evaluation methods, while striving for continuous improvement based on feedback.
- **Enhance clarity of learning outcomes:** Clearly define and communicate learning objectives in a way that is easily understood by all participants. This can involve providing specific examples, rubrics, and success criteria.
- **Improve accessibility of course materials:** Streamline the platform's search and organization system to facilitate easy access to relevant materials. Consider user-friendly interfaces and diverse formats to cater to different learning styles.
- **Explore technology for critical thinking:** Incorporate innovative technological tools and strategies that actively promote critical thinking and collaborative problem-solving in the curriculum. Encourage teachers to explore and adopt effective methods for integrating technology into their teaching.

2.2 Module 2

Module 2, offers a comprehensive exploration of authentic learning in practical settings, primarily aimed at pre-service and in-service teachers. With 10 ECTS (260 hours of labor), the module consists of different tutor-facilitated sessions, involving discussions, demonstrations of technologies, group work and practical tasks. Each session will have a strong pedagogical component, emphasizing the practical applicability of the content discussed. Learners will be expected to participate actively, sharing their everyday experience of using technology. Learners will also be encouraged to contribute to a class discussion throughout the term, on topics related to the module.

GOALS

This module aims to familiarize students with a variety of technological tools and applications used in the area of teaching and learning. To do so, the module helps students to understand the pedagogical approaches and practical aspects of technology in teaching and learning, become aware of the technological, social and linguistic implications of the use of technology in education and explore emerging issues in teaching and learning with technology.

MODULE LEARNING OUTCOMES

- Identify and evaluate the possibilities and challenges of using various technological resources and activities.
- Discuss and use technology in education from both pedagogical and socio-cultural perspectives
- Evaluate technology-enhanced learning and teaching programmes.
- Engage critically with published research and with practical learning problems.
- Show awareness of varying learners' needs and understanding how to respond with technology.

ACADEMIC AND GRADUATE SKILLS

- Understanding and evaluating primary technological tools used in education
- Ability to adapt different technologies for teaching and learning purposes
- Ability to select and integrate different technologies
- Ability to evaluate technology enhanced programmes.

The module consists of the following units:

- Unit 1 - Introduction to Education Technology Skills
- Unit 2 - Computer Mediated Communication I
- Unit 3 - Computer Mediated Communication II
- Unit 4 - The Social Network and learning
- Unit 5 - Game-based Learning
- Unit 6 - Technology and Assessment
- Unit 7 - Evaluating and researching technology-enhanced learning and teaching I
- Unit 8 - Evaluating and researching technology-enhanced learning and teaching II
- Unit 9 - Teaching with Technology

2.2.1 Course Materials

In Module 2, both students and teachers found the workload manageable (average rating 4.43 for students, 5.0 for teachers). The clarity of learning outcomes was perceived positively by both groups, with students giving an average rating of 4.24 and teachers a perfect score of 5.0. This suggests a strong alignment between expectations and delivered content. While both sides found study materials adequate (average rating 4.50 for students, 5.0 for teachers), room for improvement remains. The module structure was considered clear and helpful by both students (average rating 4.52) and teachers (although no data provided). Both groups reported high engagement and skill development, with students averaging 4.38 for interesting content and 4.40 for critical thinking development, while teachers praised content structure and delivery (ratings of 5.0). Notably, both agreed on the significant improvement in understanding of 21st-century digital skills (average rating 4.50 for students, no data for teachers). Overall, Module 2 seems to have well-structured, engaging, and effective materials, with potential for further improvement in study materials based on student feedback.

2.2.2 Teaching Conditions

In Module 2, both students and teachers found the online platform user-friendly and easy to navigate, with average ratings of 4.41 and 5.0, respectively. Finding and accessing course materials received a positive rating of 4.17 from students, compared to the teachers' rating of 4.5. The platform's visual appeal continued to climb, with both groups averaging 4.5 for students and 5 for teachers. Technical issues remained minimal for both groups (average ratings of 4.62

and 5.0). Overall, the online platform was perceived as effectively supporting learning experiences, with an average rating of 4.48 for students and 5.0 for teachers.

2.2.3 Student Feedback

Positive feedback included appreciations for the course atmosphere, the clarity of instructional materials, and freedom in learning activities. Improvement suggestions were minimal, with some students indicating no need for changes and others suggesting personal improvements. In conclusion, the module was generally well-received, with strengths in course structure, materials, and the online platform's functionality. However, there is potential for enhancing the clarity of learning outcomes and the accessibility of course materials. Students' feedback was predominantly positive, reinforcing the effectiveness of the module in providing an engaging and supportive learning environment.

2.2.4 Teachers Feedback

Teachers believed the teaching process is knowledge transfer and appreciated the detailed information and resources available for 21st-century skills. In short, there are very few improvement suggestions put forward by teachers, and some teachers indicate that there is no need to make changes. In summary, this module has received very positive feedback from teachers, especially in areas such as course clarity, student preparation, and online platform availability. The high level of student engagement and performance, as well as the minimum need for improvement, emphasizes the success of this module from the teacher's perspective.

Teachers observed that students were well prepared for the course contents, rating this aspect at 4.5. Student engagement through questions to elucidate doubts also received a perfect score of 5.0. Active participation in learning activities was rated 5.0, reflecting high levels of student engagement. Overall, the student performance was positively viewed, with a rating of 5.0.

2.2.5 Strength and Successes

- **Highly Engaging & Effective Content:** Both students and teachers found the courses interesting and valuable, fostering critical thinking and skill development. They praised

the courses for being stimulating and engaging, effectively promoting critical thinking skills.

- **Significant Skill Improvement:** Both groups reported a notable increase in their understanding of 21st-century digital skills. This suggests the module successfully equipped participants with essential skills for the modern world.
- **Comprehensive & Well-Organized:** Students and teachers commended the module for its well-organized structure and the high calibre of its course materials. This indicates a clear, accessible, and well-resourced learning environment.
- **Engagement:** Students demonstrated strong engagement and thorough preparation throughout the module. Notably, teachers observed high levels of student engagement through active participation and questions. This highlights a conducive learning environment fostering active involvement.
- **Effective Online Platform:** Both groups agreed the online platform effectively facilitated and enhanced the learning experience. This emphasizes the importance of user-friendly and well-functioning technology in supporting quality online education.

2.2.6 Areas of Improvement

- **Accessibility of Course Materials:** While students found materials adequate, their rating on finding and accessing them was quite low. This suggests potential room for improvement in search, organization, or user interface within the online platform.
- **Further Refining Clarity of Learning Outcomes:** Despite positive ratings, there might be opportunities to make learning objectives even clearer and more easily understood for all participants.

2.2.7 Recommendations

- **Enhance accessibility of course materials:** Improve search capabilities, optimize organizational structure, and consider diverse user interfaces to cater to different learning styles.
- **Further refine clarity of learning outcomes:** Clearly define and communicate learning objectives in a way that is easily understood by all participants. Utilize specific examples, rubrics, and success criteria.
- **Promote active engagement:** Encourage active participation through diverse learning activities and question-asking opportunities.

- **Maintain engaging and stimulating content:** Continue fostering critical thinking and skill development through interactive activities, real-world applications, and collaborative learning opportunities.

2.3 Module 3

This module is designed for pre-service or in-service teachers to make them equipped and skilled in authentic learning in practical dimensions. As George Siemens suggested, learning to be a physicist, a chemist, or an historian is all about forging concrete connections—interpersonal connections between apprentices and mentors, intellectual connections between the familiar and the novel, personal connections between the learner’s own goals and the broader concerns of the discipline. Connection-building will require new forms of authentic learning—forms that cut across disciplines and bring learners into meaningful contact with the future employers, customers, clients, and colleagues who will have the greatest stake in their success. Without a doubt, technology will play an essential supporting role.

Thus, Module 3, offers a comprehensive exploration of authentic learning in practical settings, primarily aimed at pre-service and in-service teachers. With 10 ECTS (260 hours of labor), the module's content is designed to enhance teachers' skills in implementing authentic learning strategies in their classrooms. Authentic learning here focuses on establishing real-life connections and problem-solving abilities that extend beyond traditional educational settings. This module is characterized by various learning approaches such as simulation-based learning, student-created media, inquiry-based learning, peer-based evaluation, and more, each contributing to the overarching goal of providing practical, relevant, and interdisciplinary learning experiences. The target group includes both bachelor and master's learners in teaching, with a curriculum rich in collaborative activities, diverse teaching methods, and a variety of assessment methods. The comprehensive nature of this module emphasizes the importance of technology in supporting authentic learning experiences, ranging from online interactions to hands-on projects and simulations. This module consists of the following units:

- Unit 1 - Introduction to Authentic Learning
- Unit 2 - Simulation-Based Learning
- Unit 3 - Student-Created Media
- Unit 4 - Inquiry-Based Learning
- Unit 5 - Peer-Based Evaluation
- Unit 6 - Working with Remote Instruments
- Unit 7 - Reflecting and Documenting Achievements
- Unit 8 - Working with Research Data

2.3.1 Course Materials

Module 3 demonstrates positive feedback across various aspects. Both students and teachers felt the workload was manageable (average rating 4.43 for students, 5.0 for teachers). Clarity of learning outcomes received favourable ratings, with students averaging 4.24 and teachers giving a perfect 5.0, indicating consistent alignment between expectations and delivered content. While both groups found study materials adequate (average rating 4.50 for students, 4.5 for teachers), there's room for improvement. The module structure remained clear and helpful, as reported by students (average rating 4.52) and teachers (although no data provided). Engagement and skill development remained high, with students averaging 4.38 for interesting content and 4.40 for critical thinking development, while teachers valued content structure and delivery (ratings of 4.5). Notably, both groups agreed on the significant improvement in understanding of 21st-century digital skills (average rating 4.50 for students, no data for teachers).

2.3.2 Teaching Conditions

In Module 3, both students and teachers experienced a user-friendly and easy-to-navigate online platform, averaging ratings of 4.41 and 5.0, respectively. Finding and accessing course materials received a positive rating of 4.17 from students and 5.0 from teachers. The platform's visual appeal remained high, with both groups averaging 4.50. Technical issues remained minimal for both groups (average ratings of 4.62 and 5.0). Overall, the online platform was perceived as effectively supporting learning experiences, with an average rating of 4.48 for students and 5.0 for teachers.

2.3.3 Student Feedback

Positive feedback included appreciations for the course atmosphere, the clarity of instructional materials, and freedom in learning activities. Improvement suggestions were minimal, with some students indicating no need for changes and others suggesting personal improvements. In conclusion, the module was generally well-received, with strengths in course structure, materials, and the online platform's functionality. However, there is potential for enhancing the clarity of learning outcomes and the accessibility of course materials. Students' feedback was predominantly positive, reinforcing the effectiveness of the module in providing an engaging and supportive learning environment.

2.3.4 Teachers Feedback

Teachers appreciated the detailed information and resources available for 21st-century skills. There were minimal suggestions for improvement, with some teachers indicating no need for changes. In conclusion, the module received an extremely positive evaluation from teachers, particularly in areas such as course clarity, student preparation, and online platform usability. The high levels of student engagement and performance, along with the minimal need for improvements, underscore the success of the module from the teachers' perspective.

Teachers observed that students were well prepared for the course contents, rating this aspect at 5.0. Student engagement through questions to elucidate doubts also received a perfect score of 5.0. Active participation in learning activities was rated 4.5, reflecting high levels of student engagement. Overall, student performance was positively viewed, with a rating of 5.0.

2.3.5 Strength and Successes

- **Comprehensive & Well-Organized:** Both students and teachers agreed the module had a clear structure and high-quality course materials, indicating a well-organized and well-resourced learning environment.
- **Engaging & Stimulating Content:** The courses were praised for being interesting and fostering critical thinking skills, highlighting their ability to engage and challenge participants.
- **Active Learning Environment:** High levels of student engagement and preparation were observed, suggesting a conducive environment that encouraged active participation and thorough preparation.
- **Supportive Online Platform:** The effectiveness of the online platform in supporting learning was a significant strength, emphasizing its user-friendliness and positive impact on the learning experience.

2.3.6 Areas of Improvement

- **Further Refining Clarity of Learning Outcomes:** Despite positive ratings, there might be opportunities to make learning objectives even clearer and more easily understood for all participants.

2.3.7 Recommendations

- **Maintain clear and well-organized structure:** Provide high-quality course materials and ensure a well-designed learning environment to facilitate easy navigation and comprehension.
- **Develop engaging and stimulating content:** Foster critical thinking skills and keep participants invested through interesting and challenging presentations.
- **Promote active learning:** Encourage active participation through diverse learning activities and question-asking opportunities to create a conducive environment for thorough preparation and engagement.
- **Refine clarity of learning outcomes:** Clearly define and communicate learning objectives in ways that are easily understood by all participants. Utilize specific examples, rubrics, and success criteria to ensure everyone is on the same page.

2.4 Module 4

Module 4 provides a comprehensive exploration of practical learning experiences for pre-service and in-service teachers. This module, equivalent to 10 ECTS (260 hours of work), includes various tutor-facilitated sessions that incorporate Group and Individual Activities, Problem-based Exercises, Performing, Reading (Analyzing) and Writing, Quizzes, Group Discussions, Presentations, and Project Assignments, along with the utilization of Learning & Teaching Technologies. Each session is designed with a strong pedagogical focus, emphasizing the practical applicability of the discussed content. Learners are actively encouraged to engage in class discussions on module-related topics throughout the term.

GOALS

The aim of the learning is to introduce the needs of 21st century skills and improve the assessment, teaching, and learning of 21st century skills by increasing assessment literacy among universities and national education stakeholders, focusing on the constructive use of assessment in education, and developing new methods for assessing 21st century skills.

MODULE LEARNING OUTCOMES

After the learning of the module, trainees will be able to:

- Understand the needs of learning and teaching of the 21st Century Skills.
- Understand the associated elements with collaboration and teamwork, creativity and imagination, critical thinking, and problem-solving skill.

- To enhance knowledge of effective instructional strategies including productive group work, participation, and digital learning for 21st Century Skills.
- To learn about information literacy, media literacy, and ICT (information, communication, technology) literacy for 21st Century Skills Learning & Teaching.
- Understand the way to select the common skills for the needs their own environment.
- Develop assessment tasks for 21st Century Skills (likes: Critical Thinking and Problem Solving).
- Identify the weakness in the assessment task.
- Adopt and modify (optimize) assessment for the 21st Century Skills.

ACADEMIC AND GRADUATE SKILLS

- Develop a comprehensive understanding of the needs of 21st-century skills, including collaboration, teamwork, creativity, imagination, critical thinking, and problem-solving.
- Gain knowledge and skills in employing effective instructional strategies such as productive group work, participation techniques, and digital learning methods tailored for fostering 21st-century skills.
- Learn to select and adapt common skills suitable for their specific educational environments, fostering a targeted approach to skill development.
- Develop assessment tasks specifically designed for evaluating 21st-century skills, with a focus on critical thinking and problem-solving.
- Gain the ability to identify weaknesses in assessment tasks and adopt optimization strategies, ensuring assessments align effectively with the requirements of 21st-century skills.
- Acquire proficiency in information literacy, media literacy, and ICT literacy relevant to 21st-century skills in learning and teaching.

This module includes the following units:

- Unit 1 - Concept of assessment for 21st century skill
- Unit 2 - Need of assessing 21st Century Skills
- Unit 3 - Impact of optimizing Assessment for development of 21st Century Skills
- Unit 4 - Cognitive Skill
- Unit 5 - Non-cognitive skill
- Unit 6 - Techniques for assessing 21st Century Skills
- Unit 7 - Criteria for the Assessment of 21st Century Skills
- Unit 8 - Role of Teacher, and Challenges
- Unit 9 - Data collection
- Unit 10 - Data analysis and Interpretation

- Unit 11 - Reporting of data for documentation of assessment 21st century skill

2.4.1 Course Materials

In Module 4, both students and teachers found the workload manageable (average rating 4.34 for students, 4.18 for teachers). They agreed the module structure was clear and helpful (average rating 4.45 for students, no data for teachers). While both groups valued the study materials (average rating 4.67 for students, 4.18 for teachers) and found the evaluation methods appropriate (average rating 4.45 for students, no data for teachers), both identified room for improvement in the clarity of learning outcomes (average rating 4.23 for students, 4.36 for teachers). Engagement and skill development remained high, with students averaging 4.32 for interesting content and 4.36 for critical thinking development, while teachers valued content structure and delivery (ratings of 4.36 for clarity and 4.18 for overall support). Finally, students highlighted the significant improvement in understanding of 21st-century digital skills (average rating 4.61 for students).

2.4.2 Teaching Conditions

Module 4's online platform received positive feedback from both students and teachers. Both groups found it user-friendly and easy to navigate, with average ratings of 4.45 (students) and 4.32 (teachers). The platform's visual appeal received consistent ratings of 4.32, and technical issues remained minimal for both groups (average ratings of 4.36 for students and 4.66 for teachers). Overall, the platform was perceived as highly effective in supporting learning experiences, with an average rating of 4.75 for students and 4.45 for teachers.

2.4.3 Student Feedback

Favourable responses highlighted the positive course atmosphere, the clarity of instructional materials, and the freedom within learning activities. Suggestions for improvement were limited, with some students expressing contentment and others proposing individual enhancements. In summary, the module was largely positively embraced, showcasing strengths in course structure, materials, and the functionality of the online platform. Nevertheless, there is room for improving the clarity of learning outcomes and the accessibility of course materials. The predominantly

positive feedback from students underscores the module's effectiveness in creating an engaging and supportive learning environment.

The motivation provided by teachers to students received a high rating of 4.56. Teachers exhibited a strong pedagogical capacity, earning a commendable score of 4.51. The interaction between teachers and students was positively rated at 4.61, indicating elevated levels of student engagement. Overall, the performance of teachers was deemed satisfying, with a rating of 4.43. The teachers were well-prepared and supportive, earning an impressive rating of 4.77.

2.4.4 Teachers Feedback

Teachers perceived the teaching process as knowledge transfer and expressed gratitude for the abundance of detailed information and resources catering to 21st-century skills. In essence, minimal suggestions for improvement were provided by teachers, with some indicating that changes were unnecessary. To summarize, the feedback from teachers has been overwhelmingly positive, particularly in aspects like course clarity, student preparedness, and the accessibility of the online platform. The substantial engagement and performance levels of students, coupled with the limited suggestions for improvement, underscore the module's success from the teacher's standpoint.

Teachers noted that students exhibited strong readiness for the course material, giving this aspect a rating of 4.08. Student involvement in seeking clarification through questions earned a perfect score of 4.41. The level of engagement in learning activities was notably high, receiving a rating of 4.68. Overall, the assessment of student performance was favorable, with a rating of 4.18.

2.4.5 Strength and Successes

- **Highly Engaging & Effective:** Both students and teachers found the content interesting and valuable, fostering critical thinking and skill development.
- **Significant Skill Improvement:** Students reported notable improvement in understanding 21st-century digital skills.
- **Clear & Well-Structured:** Participants appreciated the clarity of module structure and found the platform user-friendly.

2.4.6 Areas of Improvement

- **Further Refining Clarity of Learning Outcomes:** Despite positive ratings, there is still room to improve the clarity and understanding of learning objectives for all participants.

2.4.7 Recommendations

- **Continuous improvements** in course materials' accessibility should be a key focus, ensuring a seamless learning journey for both students and teachers.
- **Maintain engaging and stimulating content:** Continue fostering critical thinking and skill development through interesting and valuable presentations.
- **Refine clarity of learning outcomes:** Clearly define and communicate learning objectives in a way that is easily understood by all participants.

2.5 Summary of Educational Programme

Overall, the averages and the analysis of all individual Modules indicate a generally positive evaluation across all categories, with particularly high scores in the areas of learning outcomes, course materials, interlinking with other courses, explanation of key concepts, and the accessibility of the online platform.

2.5.1 Online Platform Evaluation

Both students and teachers rated positively the online platform for its user-friendliness, easy navigation, appealing interface, minimal technical issues, and effectiveness in supporting their learning experience. Students rated it favourably across all aspects (user-friendliness: 4.41-4.47, interface: 4.50-4.58, technical issues: 4.56-4.62, learning experience support: 4.48-4.64), while teachers gave perfect scores for aspects like user-friendliness and accessing materials (5.0). This consistent positivity highlights the platform's success in creating a supportive and engaging online learning environment.

However, some participants faced initial technical difficulties that were later resolved. To further enhance the platform, consider conducting regular surveys and collecting feedback from users about their experience with the platform. This feedback is vital to identify areas for improvement and prioritize necessary updates and adjustments.

2.5.2 Strength and Successes

The Educational Programme boasts a range of strengths and successes, contributing to a positive learning experience for both students and teachers. Following the major highlights, based on the evaluation analysis of all 4 individual Modules:

Engaging and Effective Content

- Both students and teachers found the content interesting, valuable, and stimulating.
- The programme fostered critical thinking and skill development.
- Participants reported a significant increase in understanding of 21st-century digital skills.

Well-Organized and Supportive Environment

- Students and teachers appreciated the clear structure and high-quality course materials.
- High levels of student engagement and preparation were observed, indicating a conducive learning environment.
- The user-friendly online platform effectively supported the learning experience.

Additional Observations

- The programme effectively promoted active participation and critical thinking.
- The online platform played a crucial role in facilitating and enhancing learning.

Taken these strengths are the key factors for the overall success and positive feedback of the Educational Programme, they can provide as best practices, a solid foundation for future programme development and offer valuable insights for other educational initiatives.

2.5.3 Areas of Improvement

While the programme has garnered positive feedback, there are a few areas where improvement can further enhance the learning experience:

Clarity of Learning Outcomes

- Despite generally positive feedback, both students and teachers identified a need for clearer and more easily understood learning objectives.
- Implementing strategies like specific examples, rubrics, and success criteria can enhance understanding for all participants.

Accessibility of Course Materials

- While students found the materials adequate, ratings on finding and accessing them were lower.
- This suggests potential improvements in the search function, organization system, or user interface of the online platform.
- Streamlining access and ensuring user-friendliness are crucial for a smooth learning experience.

Platform Stability

- Some teachers reported issues with platform stability, suggesting the need for improvements to avoid downtime.
- A reliable and stable platform is essential for uninterrupted learning and efficient course delivery.

By addressing these areas for improvement, the programme can continue to provide a successful and enriching learning experience for all participants. Last but not least, ongoing evaluation and feedback collection are crucial for identifying and implementing necessary enhancements.

2.5.4 Recommendations

By capitalizing on the strengths of the 4 Modules and addressing the identified areas for improvement, future initiatives can build even more successful learning experiences that equip participants with valuable skills and knowledge for the modern world.

Content and Learning Objectives

- Refine Clarity of Learning Outcomes: Prioritize clearly defining and communicating learning objectives in a way that all participants understand easily. Implement strategies like specific examples, rubrics, and success criteria.
- Maintain Engaging and Stimulating Content: Continue fostering critical thinking and skill development through interesting and valuable presentations. Consider incorporating interactive activities, real-world applications, and collaborative learning opportunities.

Accessibility and Platform

- Enhance Accessibility of Course Materials: Improve search functionality, optimize the organizational structure, and consider diverse user interfaces to cater to different learning styles. Ensure seamless access to materials for both students and teachers.

- Maintain Clear and Well-Organized Structure: Provide high-quality course materials and ensure a well-designed learning environment for easy navigation and comprehension.
- Address Platform Stability: Implement solutions to prevent downtime and ensure a reliable and stable platform for uninterrupted learning.

Engagement and Participation

- Promote Active Learning: Encourage active participation through diverse learning activities, discussions, and question-asking opportunities. Cultivate a conducive environment for thorough preparation and engagement.
- Develop Engaging and Stimulating Content: Design content that fosters critical thinking skills and keeps participants invested through interesting and challenging presentations.

Continuous Improvement

- Gather Regular Feedback: Continuously collect feedback from students and teachers to identify areas for improvement and ensure the programme remains relevant and effective.
- Emphasize 21st-Century Skills: Integrate relevant tools and technologies into the curriculum to equip participants with essential digital skills needed for today's world.

3 EVALUATION OF THE CAPACITY BUILDING PROGRAMME

The Capacity Building Programme comprises two modules from KU (Klaipeda University) and targets the academic staff of the universities responsible for delivering the Educational Programme. The first module is aimed at academic staff who will oversee the instruction of the 21st-century skills-based Educational Programme. The second module is intended for the academic staff of the entire faculty and is open to all faculty personnel. Academic staff members responsible for teaching the Educational Programme are required to complete both modules, while other faculty members have the choice to virtually attend Module 2.

The capacity-building programme aligns technologies with content and pedagogy and balances direct instructions with project-oriented teaching methods and with incorporated specialized training on assessments that measure 21st century skills such as critical thinking, collaboration and problem solving. Programme is designed to acquire theoretical pedagogical knowledge necessary for teachers working in higher education with pedagogical studies students and to receive feedback that helps to improve the learning experience. The ultimate goal is to enhance performance and competences of the academic staff and modernize the education system of the PC-HEIs.

All programme modules were successfully developed as MOOCs, incorporating engaging elements like videos, PowerPoints, interactive activities, relevant literature material, and quizzes. This not only allowed for flexible and accessible learning, but also facilitated multilingual delivery as the materials were translated into all project languages. This inclusive approach promotes greater participation and knowledge dissemination, maximizing the program's reach and impact within the multilingual project network.

3.1 Module 1

Module 1 consists of 4 units:

The Unit 1 is dedicated to the most relevant overview of the competencies of 21st century high school teachers in a global context. The opportunities for improving teachers' competences are presented in such areas: Student-centered learning in higher education; Innovative teaching methods. Digital tools and their application possibilities; The assessment of achievements in higher education; Development of critical and reflective thinking skills and designing the study subject; Creativity in higher education: environment, teaching and learning.

The Unit 2 is intended for a self-assessment of the situation of project partners higher education institutions, related to the students' 21st century competences development. Three activities are carried out during workshop:

- Ranking competencies of students (critical thinking, creativity, collaboration, communication, information literacy, media literacy, technology literacy, flexibility, leadership, initiative, productivity, social skills) according to how much teachers of project partners high schools pay attention to these competencies in the study process.
- Systematization of ranking results and selection of the most relevant competencies for all project partners.
- Discussing in groups the weaknesses and shortcomings of the development of chosen students' competence in project partners higher education institutions.
- Discussing in groups the strengths and opportunities for improvement of chosen competence in project partners higher education institutions.

The Unit 3 presents the concept of teamwork, the principles of team formation, the roles of members, the possibilities of using teamwork in higher education and possible dangers. Workshop participants will improve teamwork skills.

The Unit 4 is dedicated to improve the competencies and skill levels of teachers in higher education institutions. Also to strengthen the innovation capacity of higher education institutions. The Unit 4 presents student-centered teaching, innovative teaching and assessment methods in higher education, and aspects of their practical application. The Unit 4 includes aspects of critical and reflective education of students; the importance of creativity in higher education.

3.1.1 Course Materials

Students highly valued the course content, finding it relevant, clear, and well-structured. They particularly appreciated the varied resources, diverse cultural perspectives, and emphasis on practical application. Overall, Module 1 effectively equipped participants with necessary knowledge and skills, fostering critical thinking and reflection.

3.1.2 Teaching Conditions

The online platform received positive feedback for its user-friendliness, ease of navigation, and accessibility. Additionally, teachers commended the supportive learning environment,

interactive sessions, and availability of teachers for clarification. Overall, the platform facilitated a smooth and engaging learning experience. The general learning conditions were highly rated, with teachers being highlighted about their strong engagement and motivation of the students.

3.1.3 Student Feedback

Overall, the Module received positive feedback, averaging 4.4 points. Participants lauded the course content, engaging methodology, and diverse perspectives. They found the material insightful, well-presented, and applicable to their professional development. The user-friendly platform and supportive environment further contributed to a successful learning journey.

3.1.4 Strength and Successes

As the results of the questionnaires showed, 57% of the participants said that there was no need to change anything, they were satisfied with everything. This shows that the content of this module, its delivery and receiving feedback, self-reflection opportunities were successful for the learners.

3.1.5 Areas of Improvement

While the programme received mostly positive feedback, some areas could benefit from improvement. Participants suggested enhancing navigation complexity for easier access to content. Additionally, incorporating more interactive elements like exercises, videos, and live sessions could boost engagement and cater to diverse learning styles. While opinions varied on the ideal course duration, considering workload could be beneficial. Addressing these areas can further refine the program, creating an even more enriching learning experience for all.

3.1.6 Recommendations

- **Maintain the core strengths:** Continue delivering engaging content, diverse perspectives, and a supportive learning environment.
- **Simplify navigation:** Enhance platform usability and content organization for easier access and exploration.

- **Increase interactivity:** Integrate diverse learning activities like exercises, videos, and live sessions to cater to different learning styles and boost engagement.
- **Evaluate course duration:** Analyze workload impact and consider adjusting the course length while maintaining comprehensiveness.

3.2 Module 2

Module 2 consists of 4 units:

The Unit 1 defines the concept of student-centred education, discussing the aspects of active learning, cooperative learning, experiential learning, reflection, and deep learning; the dualism and interaction of teacher- and student-centred education; discusses the importance of an effective learning and educational environment; talks about the importance of choosing educational methods, with the goal that learning is perceived not as the accumulation and possession of knowledge, but as a personally experienced and lived awareness of the surrounding world and the relationships in it, which matures and transforms learners.

The Unit 2 reviews the possibilities, diversity, value, and challenges of using digital technologies in the higher education process for teachers and students. In the Unit 2 points out that when organising the study process, the fact that teachers must maintain a high level of media literacy (digital pedagogical competences) in order to organise and share educational materials with participants of the study process becomes apparent. Then there is the problem of choosing the most appropriate digital technologies. Despite the mentioned problem, digital technologies open up new opportunities to easily record the study process, copy the educational material presented in the lecture, distribute it on information platforms accessible to students, receive feedback, etc. The Unit 2 presents the classification of educational goals using digital technologies, based on Bloom's taxonomy; discusses innovative study methods applicable in higher education; presents a series of digital tools, applications, programmes, and other.

The Unit 3 presents the evaluation of higher education achievements, which is perceived at several levels: at the level of the institution, at the level of the study programme, at the level of the study subject (course), at the level of student achievements and progress. The Unit 3 discusses the compatibility of study results and student learning achievements; analyses the compatibility of the intended study results and evaluation methods; indicates that the evaluation of achievements must start from educational values, which must determine that the evaluation is effective, purposeful, goal-oriented, connected with students' experiences, cumulative, seeking progress, helping a student to improve, and promoting changes. In the Unit 3

distinguishes the most important requirements for the evaluation; discusses the main types of assessment, assessment methods and their combinations.

The Unit 4 presents critical and reflective thinking, their connections with human cognitive and metacognitive, social and emotional, practical and physical skills and their importance in developing the ability to learn, information literacy, information technology management, responsible decision-making, and creativity. The unit presents and analyses the general principles of constructing the content of the study subject, based on the theories of famous scientists, paying special attention to the importance of Bloom's and Marzano's and SOLO (Structure of Observed Learning Outcomes) taxonomies in the preparation of the study subject. In this Unit 4 pays special attention to the development of critical and reflective thinking in higher education institutions, analysing the aspects of student evaluation, self-evaluation, and independent learning as well as didactics in higher education, i.e., study methods, tools, and assessment.

3.2.1 Course Materials

Participants overwhelmingly praised the course content, highlighting its relevance to social needs, focus on 21st-century skills, and emphasis on student-centered learning. The online book and practical tasks like quizzes were particularly appreciated. The critical thinking topics received positive feedback, with participants valuing the clear explanations and well-organized materials.

3.2.2 Teaching Conditions

Feedback on the platform was mixed. While participants valued the ease of navigation and accessibility, some mentioned technical issues with sound and internet connectivity. Teachers' innovative use of tools and interactive sessions were positively perceived. The focus on feedback exchange between students and teachers was particularly commended.

3.2.3 Student Feedback

The module received excellent overall feedback, averaging high ratings. Participants emphasized the course's positive impact on developing their critical thinking and 21st-century skills. They appreciated the variety of resources, interactive tasks, and clear presentation of material. The

interactive sessions, innovative tools, and student-centered approach were highlighted as strengths. Some technical issues with the platform require attention. Overall, the module provided a valuable and engaging learning experience for participants.

3.2.4 Strength and Successes

The evaluations of this module suggest that the module was very well designed and adapted to academic staff. The material presented in the module, the tasks and their interactivity met the expectations of the learners.

3.2.5 Areas of Improvement

While the module received mostly positive feedback, some areas offer opportunities for improvement. Participants suggested enhancing video quality, particularly sound, and incorporating more interactive elements like examples and tasks. Additionally, addressing platform performance issues, especially during peak usage times, can improve accessibility and user experience. Some mentioned highlighting accessible tools for teachers with limited resources. While opinions varied on the need for overall changes, ensuring smooth platform operation and exploring diverse learning activities can further refine the programme and cater to different preferences.

3.2.6 Recommendations

- **Maintain core strengths:** Continue delivering engaging content, promoting critical thinking, and fostering a student-centered environment.
- **Enhance video quality:** Improve sound quality and consider other technical improvements for a better viewing experience.
- **Increase interactive elements:** Incorporate more diverse interactive tasks, examples, and activities to cater to different learning styles and enhance engagement.
- **Optimize platform performance:** Address performance issues, especially during peak usage times, to ensure smooth accessibility and user experience.
- **Provide guidance for limited resources:** Explore and highlight affordable and accessible tools suitable for teachers with limited resources.

3.3 Summary of the Capacity Building Programme

Overall, all students who participated in the survey and evaluation were highly educated. The results of the conducted survey show that the overall evaluation average of the Modules is 4.4 points. Learning outcomes are evaluated positively, content and interconnections are appropriate, clear and understandable for learners, clear instructions are provided in the parts of the module.

However, the majority of the challenges were for technical things such as sound, and especially for platform operation (internet-related disturbances).

3.3.1 Online Platform Evaluation

The average rating for this part was 4.3 points, but not all students were sufficiently prepared to use the platform. There were also comments about the slow operation of the platform, complicated navigation. However, most of the participants were satisfied with the platform and the modules it provided. Overall, there was a high scoring in both the presentation of material and tasks, their interactivity, and the provision of feedback.

3.3.2 Strength and Successes

The evaluations of both modules within the Capacity Building Programme reveal high satisfaction and positive learning experiences among participants. Here are some key highlights:

Content and Delivery

- Well-designed and adapted to academic staff: The modules met the needs and expectations of learners, providing relevant and engaging material.
- Interactive and engaging tasks: Diverse tasks and activities effectively fostered active participation and knowledge retention.
- Positive feedback on content delivery: Participants appreciated the overall content, delivery methods, and opportunities for self-reflection.

Student Satisfaction

- High overall satisfaction: A significant portion of participants (57%) expressed complete satisfaction with all aspects of the modules.

- Content met expectations: The content effectively addressed learning objectives and aligned with participant needs.
- Valuable for professional development: Learners perceived the modules as beneficial for enhancing their skills and knowledge relevant to their academic roles.

These strengths indicate a well-designed and successful programme that effectively engages and equips participants with valuable skills and knowledge.

3.3.3 Areas of Improvement

The Capacity Building Programme's two modules have garnered positive feedback, reflecting well-designed content and a supportive learning environment. However, opportunities exist to further refine the programme and cater to diverse learner needs:

Technical Improvements

- Enhance video quality: Improve sound quality and consider other technical improvements for a better viewing experience.
- Optimize platform performance: Address performance issues, especially during peak usage times, to ensure smooth accessibility and user experience.

Content and Engagement

- Increase interactive elements: Incorporate more diverse interactive tasks, examples, and activities to cater to different learning styles and enhance engagement.
- Highlight accessible tools: Explore and highlight affordable and accessible tools suitable for teachers with limited resources.

3.3.4 Recommendations

Building upon the program's successful elements, such as engaging content and a supportive environment, these recommendations aim to further enhance the learning experience:

Content and Delivery

- Maintain engaging content and diverse perspectives.
- Increase interactivity with varied tasks, quizzes, videos, and live sessions.
- Enhance video quality for a better viewing experience.
- Incorporate more examples and activities to cater to different learning styles.

- Highlight accessible tools for teachers with limited resources.

Platform and Accessibility

- Simplify platform navigation for easier access and exploration.
- Optimize platform performance to ensure smooth accessibility, especially during peak usage times.

Additional Considerations

- Evaluate course duration to balance comprehensiveness with workload.
- Gather ongoing feedback to identify emerging needs and areas for improvement.
- Explore innovative technologies and teaching methodologies to keep the programme current and engaging.

By implementing these recommendations, the Capacity Building Programme can continue to empower participants with valuable skills and knowledge in an even more engaging and inclusive manner.

CONCLUSIONS

This Programme Delivery Final Evaluation Report (D4.5) has delved into the two programmes developed and delivered under the 21st TS project: the Educational Programme for teachers and the Capacity Building Programme for academic staff. By analyzing individual module evaluations, gathering student and teacher feedback, and assessing the online platform, this report has identified key strengths, areas for improvement, and actionable recommendations for future iterations.

Through a multi-dimensional evaluation process, encompassing student experiences, teaching methods, and material effectiveness, we have gained valuable insights into the program's impact. Both quantitative data and qualitative feedback were utilized to provide a holistic understanding of programme delivery and its contribution to cultivating 21st-century skills in teachers. Overall, by highlighting successful approaches and pinpointing areas for improvement, D4.5 informs future initiatives and equips the project with the tools to further refine and enhance the program's impact.

Despite overcoming unforeseen challenges and delays, the project's two programmes enjoyed immense success, attracting over 900 participants and garnering nearly 600 completed questionnaires. This impressive turnout speaks volumes about the program's relevance, broad appeal, and the dedication of the partners involved. Even amidst hurdles, the project effectively engaged participants, highlighting the valuable skills and knowledge it offers. This high level of engagement positions the project for continued positive impact in the educational landscape.

EDUCATIONAL PROGRAMME

The Educational Programme has demonstrably achieved its goals, fostering positive learning experiences and promoting critical thinking and 21st-century digital skills development. Strengths like engaging content, a supportive environment, and a user-friendly platform have contributed significantly to its success. However, opportunities for improvement exist, primarily in enhancing clarity of learning objectives, accessibility of course materials, and platform stability.

Addressing these areas through recommended actions like providing clearer learning objectives with supporting examples, improving the search function and organization of materials within the platform, and ensuring platform stability will further refine the program's effectiveness. Additionally, maintaining engaging content, promoting active participation, and emphasizing 21st-century skills through relevant tools and technologies will solidify the program's foundation for future iterations. Ultimately, by capitalizing on its strengths and addressing identified areas for improvement, the Educational Programme can continue to empower teachers with the

knowledge and skills they need to cultivate 21st-century learners and bridge the gap between current education and the demands of the modern world.

Last but not least, continuous feedback collection and evaluation are always crucial to ensure the program's long-term impact and ability to adapt to evolving needs of the society and the participants.

CAPACITY BUILDING PROGRAMME

The Capacity Building Programme, equipping academic staff to deliver the Educational Programme, received positive feedback for its engaging content and supportive environment. However, room for improvement exists. Its strengths lie in well-designed content, diverse perspectives, interactive tasks, and a supportive environment. Content-wise, incorporating more diverse interactive elements and highlighting accessible tools address different learning styles and inclusivity concerns. These elements fostered positive experiences and met participant needs.

However, technical aspects, content engagement, and accessibility offer opportunities for enhancement. Technical improvements focus on video quality and platform performance, particularly during peak usage times, to ensure a smooth and accessible learning experience. Additionally, simplifying platform navigation, exploring innovative teaching methods, and continuously gathering feedback are crucial for sustained success.

Overall, to further improve the engaging program, consider enriching content with varied tasks, videos, and accessible tools. Enhance video quality and platform navigation for a seamless experience. Most importantly, regularly gather feedback, explore innovative teaching methods, and evaluate course duration to ensure an optimal learning journey for all participants. This holistic approach will empower participants with valuable skills in an even more engaging and inclusive manner.