

ICT Skills for Teaching and Learning

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ICT for Teaching and Learning aims to develop teachers' ability to use and integrate ICT to teach subjects across the curricula. The module develops teachers' ability to guide students, to achieve 21st century skills, through hands on learning approach while ensuring transferability of the methods and tools to pedagogy in teaching all subjects

Workload in hours: 150

Number of learners: 25

Mode of delivery: Blended

Status: IN PLANNING

Course public access: Public

Contributors:

Course learning outcome	Level	Weight
Understand the rationale, purpose and scope of the use of ICT in schools under the requirements of the National Curriculum Framework	Understanding	15
Use and integrate ICT in teaching and learning subjects across the curricula	Applying	25
Develop multimedia/interactive contents to facilitate teaching/learning	Creating	30
Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning	Creating	30

Total weight: 100

Topic / Unit name	Workload	Learning type	Mode of delivery	Groups	Collaboration	Feedback	Mandatory activity	Assessment		
								Points	Type	Providers

Introduction to ICT in Education

Understand the rationale, purpose and scope of the use of ICT in schools under the requirements of the National Curriculum Framework (4%)

Synchronous (2 hours)

Introduction and Ice break Activity Following the lecturer's introduction, students will introduce themselves and participate in a game titled "I Would Rather." In this activity, they will choose between two given options and explain the reasons for their choices.	20 min	Discussion	Online	Synchronous	Teacher present	No	No	No	No	No
Module Introduction Lecturer introduces the module and provides an overview of the learning outcomes, assessment methods, and general class rules.	30 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
Learning Expectations Wall Students will work in pairs to discuss and post on Padlet what they hope to learn from this module.	15 min	Discussion	Online	Synchronous	Teacher present	No	Yes	No	No	No
Lecture Time The lecturer presents how ICT supports teacher readiness and explains the historical context using slides, visuals, and short video clips. Students can access supporting materials on Moodle and may share questions in the consultation forum for the week.	25 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
Breakout Room Activity Students work in groups to discuss the current role of ICT in education and present their findings to the class. Key points are documented collaboratively in a shared Google Doc.	30 min	Discussion	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No

Total unit workload		2h								
Asynchronous (1 hour)										
Tutorial Activity Students complete a questionnaire about their background, prior experiences, and learning goals. This activity enables the lecturer to understand the students better. Submissions will be made via Moodle.	60 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No
Total unit workload		1h								
Self Study (7 hours)										
Discussion Forum: Investigating the Impact of ICT on Teaching and Learning Students will research how ICT has influenced teaching and learning practices in recent years, using credible sources such as articles, reports, or case studies. Each student will share their findings in the discussion forum either as a written post (not exceeding 300 words), a visual presentation (e.g., infographic or slide), or an audio recording (up to 3 minutes). Students are required to review and respond to at least two peers' contributions, offering constructive feedback or connecting ideas to practical examples in education.	360 min	Investigation	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No

Online Quiz The quiz assesses understanding of key milestones in educational technology, the evolution from analog to digital tools, and the role of ICT in supporting 21st-century learning, global trends, and inclusive, engaging teaching.	60 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	0	Formative	Teacher
Total unit workload	7h											
Understanding Digital Literacy												
Understand the rationale, purpose and scope of the use of ICT in schools under the requirements of the National Curriculum Framework (4%), Use and integrate ICT in teaching and learning subjects across the curricula (2%)												
Synchronous (2 hours)												
Mini Lecture Lecturer introduces digital literacy and frameworks (JISC, UNESCO, DigCompEdu) using slides, infographics, and short video clips. Students can view content in multiple formats and take notes in their preferred mode.	20 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No		
Breakout Room Activity Students discuss the difference between digital skills vs digital literacy in small breakout rooms. Each group summarizes key points in a shared Google Doc.	20 min	Discussion	Online	Synchronous	Teacher present	Yes	Yes	No	No	No		

Hands-on Digital Skills Activity In pairs, students explore tasks like navigating search engines, using cloud storage, and creating a productivity app document. Share screenshots or reflections in the forum.	40 min	Investigation	Online	Synchronous	Teacher present	No	Yes	No	No	No			
Designing a mini lesson plan Students work in pairs to design a mini lesson plan incorporating digital literacy (slides, visuals, or text) and submit it to Moodle, with the lecturer providing guidance during the activity.	30 min	Production	Online	Synchronous	Teacher present	No	Yes	Teacher	No	No			
Online Quiz Quick online quiz to check understanding of frameworks and digital skills.	10 min	Assessment	Online	Synchronous	Teacher present	No	No	Automated	No	0	Formative	Teacher	
Total unit workload	2h												
Asynchronous (1 hour)													

Forum Discussion Students read the provided article on digital literacy and post their key takeaways in the forum, using text, audio, or infographics. They are required to reply to at least two peers, sharing reflections or connecting ideas. Article: Tinmaz, H., Lee, YT., Fanea-Ivanovici, M. et al. A systematic review on digital literacy. Smart Learn. Environ. 9, 21 (2022). https://doi.org/10.1186/s40561-022-00204-y	60 min	Discussion	Online	Asynchronous	Teacher not present	No	Yes	Teacher, Peer	No	No			
Total unit workload	1h												
Self Study (7 hours)													
Report on the Use of ICT in Schools of Maldives Students select one or more schools and write a report analyzing the use of ICT in those schools. They also select two commonly used digital tools in the selected schools and identify their strengths, weaknesses, challenges, and provide recommendations.	420 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Teacher	Yes	40	Summative	Teacher	
Total unit workload	7h												
Integrating ICT Across the Curriculum													
Understand the rationale, purpose and scope of the use of ICT in schools under the requirements of the National Curriculum Framework (3%), Use and integrate ICT in teaching and learning subjects across the curricula (4%)													
Self Study (7 hours)													

ICT Tool Exploration In pairs, students will choose a digital tool related to their subject area (e.g., GeoGebra, Scratch, Canva) and explore its application in teaching and learning. Prior to the class session, each pair will prepare a brief demonstration highlighting the tool’s main features and classroom use. They will then present their demonstration during class.	420 min	Production	Online	Asynchronous	Teacher not present	No	Yes	No	No	No
Total unit workload	7h									
Synchronous (2 hours)										
Mini Lecture Lecturer introduces TPACK & SAMR models, constructivist/connectivist approaches and constructive alignment using slides, short videos, and infographics. Students can access captions, transcripts, and visuals.	20 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
ICT Tool Demonstration In pairs, students will demonstrate the selected tool, highlighting its application within their chosen subject area. They will respond to questions and receive feedback from both peers and the lecturer.	60 min	Discussion	Online	Synchronous	Teacher present	No	Yes	Teacher, Peer	No	No

Breakout Room Activity Students will collaborate in groups to examine a short classroom scenario and determine how ICT tools can enhance teaching and learning. They will identify appropriate tools, describe their potential impact, and outline possible challenges along with solutions. Key strategies should be documented collaboratively in a shared Google Doc, with reference to the Maldives National Curriculum Framework for guidance. Groups will then present their findings to the class, receiving feedback from both peers and the lecturer.	30 min	Investigation	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No		
Online Quiz Students will complete an online quiz to assess their understanding of TPACK, the SAMR model, constructivist and connectivist approaches, and constructive alignment.	10 min	Assessment	Online	Synchronous	Teacher present	No	No	Automated	No	0	Formative	Teacher
Total unit workload	2h											
Asynchronous (1 hour)												

Exploring Technology Integration in the Curriculum Students will review the Maldives National Curriculum Framework and examine how technology is integrated across different learning areas. They will write a short summary (300 words) explaining examples of ICT integration, highlighting how digital tools support teaching, learning, and assessment in various subjects. Students will submit their summaries to a discussion forum and are encouraged to comment on at least two peers' submissions to compare insights and approaches.	60 min	Discussion	Online	Asynchronous	Teacher not present	No	Yes	Teacher, Peer	No	No
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Total unit workload	1h
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Communication and Collaboration Tools

Understand the rationale, purpose and scope of the use of ICT in schools under the requirements of the National Curriculum Framework **(1%)**, Use and integrate ICT in teaching and learning subjects across the curricula **(2%)**, Develop multimedia/interactive contents to facilitate teaching/learning **(3%)**

Synchronous (2 hours)

Mini Lecture & Demo The lecturer presents collaboration platforms (Google Docs, Teams, Padlet) and live interaction features using slides and demonstrations. Supplementary videos are also provided for students to watch later at their own pace.	30 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
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Collaborative Activity Design and Reflection In groups, students will design a collaborative activity and select a suitable digital tool to support it. The activity will be shared with other groups, and after implementation, each group will submit a reflection explaining the activity, justifying the choice of tool, and discussing what worked well and what could be improved.	40 min	Production	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Breakout Room Activity Groups are given classroom scenarios (each group will be given a different scenario) to determine which tools and features (chat, screen sharing, etc.) would enhance collaboration. They document strategies in a shared Google Doc and present their scenario and their suggestions to the class.	30 min	Investigation	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Think-Pair-Share Activity Think: Students individually review an online communication scenario and consider solutions following proper etiquette and netiquette. Pair: Students discuss their ideas with a partner, refine their solution, and agree on the best approach. Share: Each pair posts their solution in the Moodle Interactive Activity.	20 min	Discussion	Online	Synchronous	Teacher present	No	Yes	Teacher, Peer	No	No

Total unit workload	2h											
Asynchronous (1 hour)												
Discussion Forum: Etiquette and safety Students read a short guide or article on netiquette, online safety, and digital collaboration best practices. They post a 100-150 word summary in the discussion forum and respond to at least two peers.	40 min	Discussion	Online	Asynchronous	Teacher not present	No	Yes	Teacher, Peer	No	No		
Online Quiz Online quiz to check understanding of collaboration tools, interaction features, and digital etiquette.	20 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	0	Formative	Teacher
Total unit workload	1h											
Self Study (7 hours)												
Collaborative Tool Investigation with Peer Review Students research two collaboration tools relevant to their subject, analyzing each tool's strengths, weaknesses, and potential classroom applications. They create a brief summary of their findings, which can be submitted as text, infographic, or audio. Afterwards, students review a peer's summary and provide structured feedback.	420 min	Investigation	Online	Asynchronous	Teacher not present	No	Yes	Peer	No	No		
Total unit workload	7h											

Creating Digital Content

Use and integrate ICT in teaching and learning subjects across the curricula **(2%)**, Develop multimedia/interactive contents to facilitate teaching/learning **(5%)**, Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning **(3%)**

Synchronous (2 hours)

Discussion Discuss examples of digital content student have used or seen in educational settings. Lecturer prompts with questions like “What makes digital content engaging and inclusive?”	20 min	Discussion	Online	Synchronous	Teacher present	No	No	Teacher, Peer	No	No
Mini Lecture and Demonstration Lecturer demonstrates the principles of layout, design, colour theory, and accessibility, and provides practical demonstrations on using Canva, Adobe Express, and Piktochart, as well as on creating PowerPoint presentations, videos, and podcasts.	40 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
Breakout Room Activity In groups, students explore one tool (Canva, Piktochart, or Adobe Express), noting features for accessibility and design.	30 min	Investigation	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No

Watch microlearning videos Students watch short videos on the principles of designing multimedia content, including accessibility, colour contrast, and the use of alt text.	30 min	Acquisition	Online	Asynchronous	Teacher present	No	No	No	No	No			
Total unit workload	2h												
Asynchronous (1 hour)													
Researching accessible digital designs Students identify one example of an inclusive digital learning material and analyse the factors that make it effective. They will share their analysis in the discussion forum and respond to at least two peers’ posts.	40 min	Investigation	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No			
Online Quiz Students complete an online quiz to assess their understanding of UDL principles and key design concepts.	20 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	0	Formative	Teacher	
Total unit workload	1h												
Self Study (7 hours)													

Creating digital content Students create one digital teaching material (e.g., infographic, narrated slideshow, or mini video) applying UDL and design principles.They will share the material in the discussion forum and provide as well as receive peer feedback.	420 min	Production	Online	Asynchronous	Teacher not present	No	Yes	Teacher, Peer	No	No
Total unit workload	7h									

Games and Gamification in Education

Use and integrate ICT in teaching and learning subjects across the curricula **(2%)**, Develop multimedia/interactive contents to facilitate teaching/learning **(5%)**, Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning **(3%)**

Synchronous (2 hours)

Mini Lecture and Demonstration Lecturer explains game mechanics and differences between game-based vs gamified learning with examples.	20 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
Platform Exploration In groups, students explore Kahoot, Quizizz, Blooket, or Wordwall features and discuss classroom applications.	40 min	Investigation	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Simple Game Based Activity Students create a quick quiz or activity on one platform and share it with others in the forum for their feedback.	30 min	Production	Online	Synchronous	Teacher present	No	Yes	Teacher, Peer	No	No

Gamification Design Challenge In groups, students create a mini learning activity using gamification elements such as points, badges, or levels. They arrange the steps to ensure progression and engagement, then share their activity for peer feedback and refine it based on suggestions.	30 min	Production	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Total unit workload	2h									
Asynchronous (1 hour)										
Design Mini Game Students outline a subject-based mini-game including objectives, mechanics, and rewards.	30 min	Production	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No
Forum Discussion Students share their activity in the discussion forum, receive feedback from peers, and make improvements based on the suggestions.	30 min	Discussion	Online	Asynchronous	Teacher not present	No	Yes	Teacher, Peer	No	No
Total unit workload	1h									
Self Study (7 hours)										

Gamified Learning Analysis Project Students research 2 examples of educational games or gamified activities relevant to their subject. They analyse each example's effectiveness, engagement, learning outcomes, and accessibility, comparing which are most successful and why. Students then present their findings in a report, infographic, or presentation and provide feedback on peers' analyses.	420 min	Investigation	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
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Total unit workload	7h
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Safe, Ethical and Responsible ICT Use

Understand the rationale, purpose and scope of the use of ICT in schools under the requirements of the National Curriculum Framework **(3%)**, Use and integrate ICT in teaching and learning subjects across the curricula **(1%)**

Synchronous (2 hours)

Mini Lecture The lecturer introduces key concepts, including cyber safety and privacy, legal and ethical responsibilities, and digital citizenship, using interactive polls to assess students' understanding.	30 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
Breakout Room Activity 1 Students work in groups to discuss real-world scenarios related to online privacy, cyberbullying, copyright issues, plagiarism, and disrespectful online behaviour. Each group provides an example to illustrate each issue.	30 min	Discussion	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No

Breakout Room Activity 2 Students are provided with scenarios on online privacy, cyberbullying, copyright issues, plagiarism, and disrespectful online behaviour. In groups, they discuss and propose appropriate ways to address each situation.	30 min	Discussion	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Design a Mini Lesson Plan Students create a short lesson plan to teach students about digital footprints, digital responsibility, and respectful online behaviour. They select a target age group, set learning objectives, and outline the lesson structure, including an introduction, core activity (discussion, quiz, or role play), and closure. Groups present their lesson plan and get feedback from lecturer and peers.	30 min	Production	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Total unit workload	2h									
Asynchronous (1 hour)										

My Digital Footprint Reflection Students explore their digital footprint to understand how their online actions shape their digital identity. They search their names and profiles online, review their social media presence, and analyse the information available about them. They then write a short report reflecting on what they discovered, how it aligns with a positive digital identity, and steps to manage and improve their online presence responsibly.	60 min	Investigation	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No
Total unit workload	1h									
Self Study (7 hours)										
Developing Materials for the Mini Lesson Plan After revising their lesson plan based on feedback, students develop supporting materials (videos, infographics, slides, handouts, or quizzes) for the lesson. They then share these materials on Moodle for peer review and constructive feedback.	420 min	Production	Online	Asynchronous	Teacher not present	Yes	Yes	Teacher, Peer	No	No
Total unit workload	7h									
Learning Management Systems (LMS)										
Use and integrate ICT in teaching and learning subjects across the curricula (2%) , Develop multimedia/interactive contents to facilitate teaching/learning (4%) , Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning (3%)										
Synchronous (2 hours)										

LMS Data Tracking Research Students research how LMS platforms track learner data, including progress, participation, and assessment results. They analyse the benefits and implications of data tracking for teaching and learning, and submit their findings as a short report or infographic.	60 min	Investigation	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No
Total unit workload	1h									
Self Study (7 hours)										
Designing a Gamified Mini-Course in LMS Students design and build a mini-course or module in an LMS (Moodle, Google Classroom, or Seesaw) incorporating gamification elements such as points, badges, levels, or conditional release to enhance learner engagement. Students share it with peers to get their feedback.	420 min	Production	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
Total unit workload	7h									
ICT for Assessment and Feedback Use and integrate ICT in teaching and learning subjects across the curricula (2%) , Develop multimedia/interactive contents to facilitate teaching/learning (4%) , Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning (3%)										
Synchronous (2 hours)										

Asynchronous (1 hour)										
Exploring Feedback Strategies Students watch short videos on “Digital Feedback Strategies” and “Interactive Rubrics.” Afterwards, they post examples of effective ways to give digital feedback that enhance student motivation and learning, and respond to at least two peers’ posts in the forum.	60 min	Practice	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
Total unit workload	1h									
Self Study (7 hours)										
Analysing Digital Assessment Tools Students research and compare at least two assessment tools (e.g., Google Forms vs. Plickers) focusing on accessibility, usability, and feedback options. Submit a short report or infographic summarizing findings.	180 min	Investigation	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No

Designing a Digital Assessment Plan Students select a grade level, topic, and learning outcome from the Maldives National Curriculum and design a suitable assessment plan. They identify the type of assessment (diagnostic, formative, or summative), choose an appropriate digital tool (e.g., Google Forms, Socrative, or Mentimeter), and justify their choices by explaining how the tool supports learning and how feedback will be provided to students.	240 min	Production	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No
Total unit workload	7h									
Assistive Technologies and Inclusive Education										
Use and integrate ICT in teaching and learning subjects across the curricula (2%) , Develop multimedia/interactive contents to facilitate teaching/learning (4%) , Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning (3%)										
Synchronous (2 hours)										
Experience Sharing Students discuss prior experiences with assistive technologies and inclusive teaching.	10 min	Discussion	Online	Synchronous	Teacher present	No	No	Teacher, Peer	No	No
Mini Lecture and Demonstration Lecturer demonstrates tools like screen readers, immersive readers, speech-to-text, tablets/iPads for SEN and EAL learners.	30 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No

Tool Exploration In groups, students explore a selected tool, investigating its features that support accessibility and inclusion. They then post their findings in the forum for peer feedback and discussion.	40 min	Investigation	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Creating a Sample Activity In pairs, students practice creating a simple inclusive learning activity using one assistive tool and post it to the forum for their peers to give feedback.	40 min	Practice	Online	Synchronous	Teacher present	No	Yes	Teacher, Peer	No	No
Total unit workload	2h									
Asynchronous (1 hour)										
Video Tutorials Students watch videos on Inclusive ICT strategies and best practices for EAL/SEN learners.	20 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No
Forum Discussion After watching the videos, students post one example of how a tool can enhance inclusion, responding to at least two peers.	40 min	Discussion	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
Total unit workload	1h									
Self Study (7 hours)										

Designing a Lesson Students design a lesson that integrates differentiated instruction using ICT, demonstrating how the chosen tools promote accessibility and support inclusive learning.	420 min	Production	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No
Total unit workload	7h									
Reflective Practice Using ICT										
Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning (3%)										
Synchronous (2 hours)										
Mini Lecture and Demonstration Lecturer demonstrates digital portfolio tools (Padlet, Wix, Google Sites) and blogging platforms, showing how to link reflections to competencies.	30 min	Acquisition	Online	Synchronous	Teacher present	No	No	No	No	No
Exploring the Tools In groups, students explore a selected portfolio or blog tool and experiment with its features for reflection and professional documentation.	45 min	Investigation	Online	Synchronous	Teacher present	Yes	Yes	Peer	No	No
Presenting the findings on the tools Students present the results of their tool exploration from the previous activity and respond to questions raised by their peers.	30 min	Discussion	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No

Tool-Feature Matching Challenge Students will participate in an interactive activity in which they match each tool with its corresponding features listed alongside.	15 min	Practice	Online	Synchronous	Teacher present	No	No	Automated	No	No
Total unit workload	2h									
Asynchronous (1 hour)										
Video tutorials Students watch short videos on effective digital portfolios, reflective blogging, and professional networking strategies.	30 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No
Forum Discussion After watching the videos, students post an example of how they would use digital portfolios or blogs for reflection or professional development in the forum and reply to at least two peers.	30 min	Discussion	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
Total unit workload	1h									
Self Study (7 hours)										
Creating Own Digital Portfolio Students create their digital portfolio or blog, adding initial content and connecting reflections to relevant competencies and standards. They then share their portfolio/blog links with peers to receive feedback.	180 min	Production	Online	Asynchronous	Teacher not present	No	No	Peer	No	No

Reflection Students revise their portfolio or blog based on peer feedback and write a brief reflection explaining the changes they made and the rationale behind them.	240 min	Practice	Online	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
Total unit workload	7h									

Emerging and Future Technologies in Education

Use and integrate ICT in teaching and learning subjects across the curricula **(2%)**, Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning **(3%)**

Synchronous (2 hours)

Mini Lecture and Demonstration The lecturer introduces AI, VR, and robotics in education through multimedia resources (slides and short videos) and gives a demonstration of how to use ChatGPT.	30 min	Acquisition	Onsite	Synchronous	Teacher present	No	No	No	No	No
Mini Lecture The lecturer introduces key trends in educational technology such as learning analytics, adaptive learning, and flipped classrooms using multimedia examples and short case studies. The session then focuses on ethical considerations, where the lecturer discusses issues like AI bias, data privacy, and screen time, encouraging students to share ideas on how teachers can promote responsible and ethical technology use in classrooms.	30 min	Acquisition	Onsite	Synchronous	Teacher present	No	No	No	No	No

Group Discussion Students work in groups to analyse case studies related to ethical issues in educational technology, such as AI bias, data privacy, or excessive screen time. Each group identifies the ethical challenges, discusses possible solutions, and suggests how teachers can address these responsibly in classroom practice. Groups then share a brief summary of their findings with the class for comparison and discussion.	30 min	Discussion	Onsite	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Exploring AR and VR Students use AR and VR headsets to explore the technology and its potential applications in education. After the exploration, students discuss how AR and VR can enhance engagement and learning, identify possible classroom uses, and reflect on challenges such as accessibility, cost, and technical difficulties, suggesting strategies to address these issues. Groups then share their insights with the class.	30 min	Investigation	Onsite	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Total unit workload	2h									
Asynchronous (1 hour)										

Forum Discussion Students select from a set of provided articles and videos on teachers’ responsibilities in integrating emerging technologies. They write a reflection in the discussion forum highlighting key takeaways, respond to at least one peer, and engage in discussion.	60 min	Discussion	Onsite	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
Total unit workload	1h									
Self Study (7 hours)										
Design and Share: Lesson Plan with Emerging EdTech Students explore real-world examples of learning analytics, adaptive learning, and flipped classroom approaches in global or local education contexts. They then design a lesson plan incorporating one or more of these approaches. Students explain how available tools such as LMS features, analytics dashboards, or video platforms would support the lesson. Finally, they create a short podcast to present and explain their lesson plan, highlighting key features and learning strategies.	420 min	Production	Onsite	Asynchronous	Teacher not present	No	No	Teacher, Peer, Other	No	No
Total unit workload	7h									
ICT- Integrated Lesson Planning Use and integrate ICT in teaching and learning subjects across the curricula (1%) , Develop multimedia/interactive contents to facilitate teaching/learning (3%) , Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning (4%)										
Synchronous (2 hours)										

Mini Lecture The lecturer introduces backward design, ICT integration, and Bloom's taxonomy alignment using multimedia examples and sample lesson plans, highlighting differentiation strategies and UDL principles to support diverse learners.	30 min	Acquisition	Onsite	Synchronous	Teacher present	No	No	No	No	No
Group Discussion In groups, students examine sample ICT-integrated lesson plans and identify how learning outcomes, instruction, assessment, and engagement are aligned with Bloom's taxonomy and UDL principles.	30 min	Discussion	Onsite	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Designing ICT-Integrated Lessons with Differentiation and UDL Students are grouped based on their subject area to design an ICT-integrated lesson plan using backward design, incorporating differentiation strategies and UDL principles.	30 min	Production	Onsite	Synchronous	Teacher present	Yes	Yes	No	No	No

Peer Review Groups exchange their draft ICT-integrated lesson plans with another group within the same subject area. Each group reviews the peer group's plan, focusing on alignment with learning outcomes, Bloom's taxonomy, ICT integration, differentiation, and UDL principles. Feedback is provided constructively, and groups refine their lesson plans based on the input received.	30 min	Discussion	Onsite	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Total unit workload	2h									
Asynchronous (1 hour)										
Researching Backward Design and ICT Tools Explore additional resources on backward design, ICT tools, and differentiation strategies. Take notes in preferred format.	30 min	Acquisition	Onsite	Asynchronous	Teacher not present	No	No	No	No	No
Forum Discussion Based on their exploration of the additional resources, students post a reflection in the discussion forum highlighting their key takeaways and respond to at least one peer's post. Students engage in ongoing discussion to compare ideas, share insights, and deepen their understanding of effective ICT-integrated lesson planning.	30 min	Discussion	Onsite	Asynchronous	Teacher not present	No	No	Teacher, Peer	No	No
Total unit workload	1h									
Self Study (7 hours)										

Individual Lesson Planning Students independently design an ICT-integrated lesson plan using backward design for their subject area. They incorporate learning outcomes, Bloom's taxonomy, differentiation strategies, and UDL principles. They submit their lesson plan in the Moodle.	180 min	Production	Onsite	Asynchronous	Teacher not present	No	No	No	No	No
Peer Review with Materials Students evaluate the completed lesson plan and supporting materials of another student from the same subject area. Each student reviews the peer's plan and materials, focusing on alignment with learning outcomes, ICT integration, differentiation, and UDL principles. Constructive feedback is provided, and students refine their lesson plans and materials.	120 min	Practice	Onsite	Asynchronous	Teacher not present	No	Yes	Peer	No	No
Developing Materials for the Lesson Plan Students create any supporting materials for their lesson plan, such as slides, worksheets, multimedia resources, or interactive tools, ensuring alignment with the lesson objectives and ICT integration.	120 min	Production	Onsite	Asynchronous	Teacher not present	No	No	No	No	No
Total unit workload	7h									

Case Studies - ICT in Real Classroom Scenarios

Use and integrate ICT in teaching and learning subjects across the curricula **(1%)**, Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning **(2%)**

Synchronous (2 hours)										
Online Quiz Students complete a short online quiz to recall key concepts of TPACK and SAMR. Questions include definitions, matching scenarios to SAMR levels, and identifying TPACK components in classroom examples. Instant feedback reinforces understanding and application.	20 min	Practice	Onsite	Synchronous	Teacher present	No	No	Teacher, Automated	No	No
Group Activity 1 In groups, students review Maldivian and international ICT classroom case studies. They identify effective strategies, challenges faced, and propose ways to address those challenges. Groups summarize their findings in a table or short presentation and share with peers for discussion and feedback.	50 min	Investigation	Onsite	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Group Activity 2 Students are given classroom ICT case studies and apply the TPACK and SAMR frameworks to analyse them. In groups, they map how technology was used effectively, identify areas for improvement, and reflect on strategies to enhance teaching and learning.	50 min	Investigation	Onsite	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No
Total unit workload	2h									
Asynchronous (1 hour)										

Analysis of Case Studies Students individually analyse provided Maldivian and international ICT case studies, identifying successes, challenges, TPACK components, and SAMR levels. They propose strategies to improve or replicate successes and submit their analysis.	60 min	Investigation	Onsite	Asynchronous	Teacher not present	No	No	Teacher	No	No		
Total unit workload	1h											
Self Study (7 hours)												
Designing a Technology-Enhanced Lesson Plan and Reflective Report Students will design a technology-enhanced lesson plan for any grade and subject, integrating appropriate ICT tools and demonstrating the application of 1–2 relevant learning theories or frameworks. The lesson plan should include an introduction, main activity, and closure, following the provided format. They will also write a reflective report (2000–2500 words) discussing their lesson design and the implementation of one selected activity. The report should justify the use of learning theories and technology, describe the activity's key elements and implementation (including screenshots or links), and reflect on what worked well and areas for improvement, supported by relevant literature.	420 min	Production	Onsite	Asynchronous	Teacher not present	No	No	Teacher	Yes	60	Summative	Teacher

Total unit workload		7h								
Reflection and Planning Forward										
Use and integrate ICT in teaching and learning subjects across the curricula (2%) , Develop multimedia/interactive contents to facilitate teaching/learning (2%) , Develop resources and demonstrate delivery of lessons by incorporating ICT and different models of learning (3%)										
Synchronous (2 hours)										
Interactive Online Quiz Lecturer conducts a live interactive quiz (e.g., Kahoot, Mentimeter, or Poll Everywhere) to review key concepts and learnings from the module. Students respond in real-time, and results are discussed immediately.	40 min	Practice	Online	Synchronous	Teacher present	No	No	Teacher, Automated	No	No
Goal Setting Exercise Students individually set SMART goals for future ICT integration in their teaching or learning contexts.	20 min	Production	Online	Synchronous	Teacher present	No	No	No	No	No
Personal Reflection and Growth Sharing Students reflect on and discuss their personal growth, key achievements, and challenges in ICT knowledge and confidence within subject-based groups. The group insights are then shared with the whole class for a collective discussion.	40 min	Discussion	Online	Synchronous	Teacher present	Yes	Yes	Teacher, Peer	No	No

Module Feedback Students use a Miro board to note what they liked about the module and suggest improvements. The class then reviews and discusses all inputs to identify key recommendations for future module enhancements.	20 min	Discussion	Online	Synchronous	Teacher present	No	No	Teacher, Peer	No	No
Total unit workload	2h									
Asynchronous (1 hour)										
Creating a Reusable Teaching Resource Students design a multimedia or interactive resource (e.g., video, infographic, quiz, or presentation) that can be used by the lecturer in future semesters. The resource should align with a course topic and include a short note on its purpose and how it supports learning. Peers can give constructive feedback on the resource.	60 min	Production	Online	Asynchronous	Teacher not present	No	Yes	Peer	No	No
Total unit workload	1h									
Self Study (7 hours)										
Portfolio Students create a portfolio summarizing their learning, reflecting on growth, and documenting future ICT goals and strategies. They submit their portfolio to Moodle as a podcast, video, or another chosen format.	420 min	Production	Online	Asynchronous	Teacher not present	No	No	Teacher	No	No
Total unit workload	7h									

Total course workload	150h
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