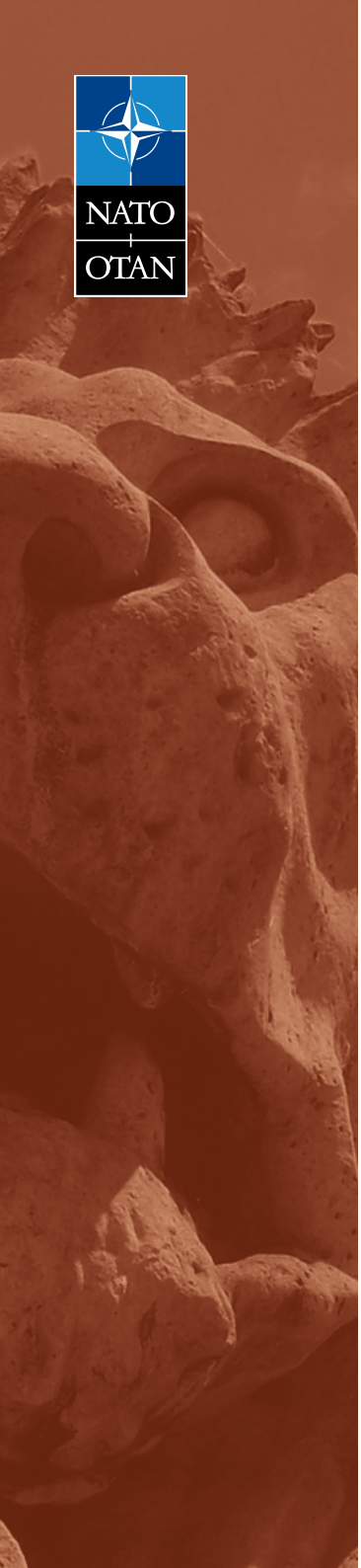


NATO
OTAN

Faculty Development

CURRICULUM GUIDE

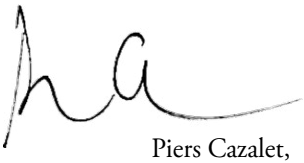
TABLE OF CONTENTS

PREFACE

The genesis of this Faculty Development Curriculum Guide occurred in 2016. With the advent of the Defence Education Enhancement Programme (DEEP) Master Instructor Programme (MIP), and in anticipation of future graduates from our partner institutions, the DEEP Faculty Development Working Group (FDWG) recognised the need for a curriculum guide to aid these graduates once the FDWG facilitators certified them as Master Instructors (MIs). The expectation is these MIs, with institutional leadership support, will develop a faculty development programme or revise and enhance existing faculty development initiatives at their home institutions. After three years of drafting and refining, the document remained dormant as the COVID-19 pandemic severely curtailed the FDWG efforts to complete this guide. When the team assembled in Reichenau, Austria in April 2022, its primary goal was to complete this important working aid for our current and future MIs. Despite challenges associated with COVID-19 and volatile geopolitical situations, the FDWG proudly certified multiple MIs in 2021 and early 2022 with various partner institutions in Afghanistan and Ukraine. Unfortunately, these MIs will have to wait to begin their programmes, but it is our hope that these MIs and all those in the future will use their expertise in adult learning, instructional design, student centered learning techniques, curriculum development, and assessment/evaluation methods to meet their institutional needs while integrating democratic values of defence institution building.

For all current and future Master Instructors and for institutions using this Guide, it will help direct your contributions to your professional military educational institution's faculty development. From a strategic perspective, your efforts will help reach the PfPC's vision of an integrated Euro-Atlantic Partnership and support enduring partnerships contributing to regional stability through multinational defence education, security sector cooperation, and capacity building initiatives.

I thank everyone who generously contributed their time and effort during the drafting process, and I look forward to the establishment, revision, and sustainment of our partner nation's faculty development programmes.



Piers Cazalet,

Director for Defence and Security Cooperation,
Operations Division, NATO Headquarters Brussels

I. PURPOSE

This curriculum guide provides information for certified Master Instructors (MIs) who are empowered to create a faculty development programme (FDP) for their professional military institution. This document resulted from a collaborative effort by a multinational team of academics drawn from multiple NATO and PfP countries. It provides a starting place for individuals or partner organisations looking to establish and sustain faculty development programmes for their professional military institutions. This document should inspire a professional dialogue within partner countries about the kind of education each aspires to have and wishes to impart to its institutions. It is not intended to be adopted verbatim, but rather adapted to fit institutional needs, military educational requirements, and cultural contexts. As a curriculum guide, this document provides a solid foundation to build and to sustain faculty development courses and programmes in partner military academic institutions.

II. CONNECTION TO THE NATO DEEP EDWG MASTER INSTRUCTOR PROGRAMME (MIP)

The desired NATO DEEP faculty development initiative end state is for partner institutions to have a comprehensive and sustainable FDP that supports instructors with modern pedagogical techniques and approaches. Key to this plan is to have certified Master Instructors create and deliver faculty development and training for new and experienced faculty to ensure continuity of teaching excellence at their respective schools. The MIP's primary goal is for institutions to use their Master Instructors to maintain this faculty development programme independent of any outside assistance after MIP completion. (For more on the MIP, see Appendix I. PFPC - EDWG - Educators Faculty Development Group – Other Faculty Development Programmes to Supplement Local Programmes). Incoming faculty members should receive a foundational training course on pedagogical effectiveness at the beginning of their tenure and throughout their teaching careers. The designated Master Instructors can use this curriculum guide for the creation and delivery of initial and recurring faculty development training. This document also emphasises the necessity of succession planning for long term success.

III. STRUCTURE

This Curriculum Guide assists Master Instructors in their efforts to design, develop, implement, and sustain a Faculty Development Programme (FDP) for their institution. The document provides a foundation in adult learning, instructional design and techniques, curriculum development, and assessment/evaluation; all are aligned with institutional needs and democratic values of Defence Institution Building. It provides a broad outline of a course that could eventually serve as the foundation for a more expansive faculty development programme. This guide is learning outcomes based.

Faculty Development Curriculum Guide (FDCG)

This curriculum consists of six modules:

1) Models and principles of adult learning
    a) Knowles' andragogy
    b) Bloom's taxonomy and learning domains
    c) Active learning
    d) Experiential learning
    e) Critical thinking
    f) Learner motivation
    g) Metacognition
2) Diverse perspectives
    a) Intercultural perspective
    b) Civilian-Military perspective
    c) Gender perspective
3) Active Learning Techniques
    a) Active and passive learning.
    b) Interactive lecture, case study, panels, debates, and discussion options.
    c) Metacognitive reflection
4) Instructional design

a) Backwards design

b) Lesson planning

c) Course design

d) Curriculum development

5) Assessment and Evaluation

a) Students' diagnostic, formative and summative assessment

b) Faculty self-assessment and peer assessment

c) Lesson, course, curriculum, and programme evaluation

d) Feedback/Feed forward methods

6) Enhancing Education through Emerging Technologies.

a) Digital literacy

b) E-learning

c) Blended learning

d) Use of technology

These modules can and should be tailored to institutional needs.

IV. USING THIS CURRICULUM GUIDE

This document makes certain implicit assumptions. The first is that learning will take place in a permissive environment and active learning will be part of the learning process and experience. Second, its governance will be pluralistic so that learners have some input in shaping future iterations of the curriculum. Furthermore, the success of this curriculum is tied to having a faculty structure with an evaluation and promotions system in place as well as an overall institutional desire for faculty development. Absent such a system and motivation, this curriculum is unlikely to succeed.

Multinational Team of Academics at work on the FDCG during EDWG meeting in Reichenau, Austria, April 2022.

DESCRIPTION OF MODULES

Module Name

1. Models and Principles of Adult Learning

Description/ Scope

In this module, participants examine models and principles that explain how and why adults learn. Concepts include Knowles' andragogy, Bloom's taxonomy and domains of learning, Kolb's experiential learning model, student-centered learning, active learning, critical thinking, learner motivation, and metacognition. Participants will apply these concepts to understand their own learning experiences and to consider the implications of these concepts on teaching in their own courses.

Objectives/ Outcomes

The participants will be able to:

- Explain the connections between Knowles' andragogical principles and the idea of active and student-centered learning.
- Consider the implications of Kolb's experiential learning model on lesson design.
- Apply Bloom's taxonomy to learning objectives and assessment of individual learning.
- Describe the cognitive, affective, and psychomotor domains of learning.
- Explain how to incorporate critical thinking and promote metacognition in learning experiences.
- Examine the importance of emotions to learning and the affective domain. Participants explain the value of creating a positive learning environment.
- Describe adult motivations for learning and how to develop internal motivation by tying material to student's needs and desires to learn. (Learners must see the benefit of the content and learning activities.)

Resources

- Bloom's taxonomy on-line course https://deepportal.hq.nato.int/ilias/goto.php?target=crs_171&client_id=DEEP (available upon registration).
- Brookfield, Stephen V. *The Skillful Teacher*, 3rd Edition. (London: John Wiley & Sons, 2015).

- Critical Thinking: *Foundation for Critical Thinking*. https://www.criticalthinking.org
- Jarvis, Peter, John Holford, Colin Griffin, editors, *The Theory and Practice of Learning* 2nd Edition (London: Routledge, 2003)
- Jarvis, Peter, "Learning Model" in Jarvis, Peter, Stella Parker, and Edward L. Thorndike, *Human Learning* (London, Routledge, 2006).
- Knowles, Malcolm, *The Adult Learner: A Neglected Species,* Chapter 3, (Madison, WI: Gulf Publishing, 1973), accessed April 15, 2022. http://files.eric.ed.gov/fulltext/ED084368.pdf
- Kolb's Experiential Learning Model: https://experientiallearninginstitute.org
- Merriam, Sharan and Laura Birema, *Adult Learning: Linking Theory and Practice* (San Francisco: Jossey-Bass, 2014).
- North Central Regional Educational Laboratory, *Critical Issue: Working Toward Student Self-Direction and Personal Efficacy as Educational Goals*. http://www.ncrel.org/sdrs/areas/issues/students/learning/lr200.html
- Tight, Malcolm. *Key Concepts in Adult Education and Training* (London: Routledge, 2012).
- Wlodkowski, Raymond J., and Margery B. Ginsberg. *Enhancing Adult Motivation to Learn: A Comprehensive Guide for Teaching All Adults* (London: John Wiley & Sons, 2017).

Methodologies/Techniques

The goal of this module is for participants to understand models and principles and the relationships between them. In future modules, participants will apply these concepts in teaching and course implementation:

- On-line Treasure Hunt: For each concept, participants do their own research in advance of the lesson. Participants then explain their findings to the class.
- Mind Map exercise: Participants work in pairs to draw a mind map that connects the different concepts from the module.
- Role play: Participants break into two groups to role play active and passive teaching scenarios.
- Bloom's taxonomy: Pick a teaching topic and have students in small groups develop an objective for each level of Bloom's cognitive domain.

- Chalk talk: Participants silently write their responses and perspectives to a provided question on a white board. https://www.csustan.edu/sites/default/files/writingprogram/Pages/documents/ChalkTalk.pdf

Assessments

- Participants explain concepts in their own words drawing upon their own learning experiences. Discuss how they can use this approach in the classroom. Discuss how this will change their current teaching style. Participants write learning objectives using different levels of Bloom's revised Taxonomy.

Glossary

- **Adult learning**: How adults learn which includes pedagogy, experiential learning, and characteristics of the adult learner (emotions, development, neuroscience, etc.) Hoare, C. (2006) *Handbook of adult development and learning*. New York, Oxford University Press.
- **Affective learning**: This area is concerned with feelings or emotions. Again, the taxonomy is arranged from simpler feelings to those that are more complex. (https://thesecondprinciple.com/instructional-design/threedomainsoflearning/)
- **Andragogy**: A set of adult learning principles developed by Malcolm Knowles. Knowles assumptions about adult learners. The method and practice of teaching adults, especially as an academic subject or theoretical concept.
- **Critical thinking**: A term to describe learning, thought, and analysis that go beyond the memorisation and recall of information and facts. In its most basic expression, critical thinking occurs when students are analysing, evaluating, interpreting, or synthesising information and applying creative thought to form an argument, solve a problem, or reach a conclusion.
- **Metacognition:** The process of thinking about one's own thinking and learning.
- **Motivation**: A reason or reasons for acting or behaving in a particular way.
- **Student-Centered Learning**: An approach to learning in which learners choose not only what to study but also how and why that topic might be of interest. The learning environment has learner responsibility and activity at its heart, in contrast to the emphasis on instructor control and the coverage of academic content found in much conventional, didactic teaching.

Module Name

2. Diverse perspectives

Description/ Scope

A diverse perspective (gender, Civilian Military (CIVMIL), culture) should be an inherent and necessary part of a comprehensive approach to military operations. It is not only the right thing to do, but it also helps us do things right. In this module we consequently focus on why a diverse perspective has become an important goal and a tool in military operations, and why this has national as well as international implications.

Considering alternative perspectives is also an essential process in building critical thinking and decision-making skills as they ensure consideration of a 360 view of an issue.

Objectives/ Outcomes

The participants will be able to:

- Identify the value of diversity perspectives in a classroom.
- Integrate diverse perspectives (gender, CIVMIL, culture) in design and execution of their course.
- Assess how considering diverse perspectives impacts decision-making.
- Explain how cultural values shape instruction in the host institution.

Resources

- Diversity, Inclusion, and Equal Opportunity in the Armed Services: Diversity, Inclusion, and Equal Opportunity in the Armed Services: Background and Issues for Congress, https://sgp.fas.org/crs/natsec/R44321.pdf
- Hofstede, Geert, The 6-D Model of National Culture, https://geerthofstede.com/culture-geert-hofstede-gert-jan-hofstede/6d-model-of-national-culture/
- Kerr, Alexandra, "Introduction, Defense Institution Building: A New Paradigm for the 21st Century," *PRISM News*, November 20, 2017, accessed April 6, 2022, https://cco.ndu.edu/News/Article/1375664/introduction-defense-institution-building-a-new-paradigm-for-the-21st-century/
- *Teaching gender in the Military* https://www.dcaf.ch/sites/default/files/imce/Teaching%20Gender%20in%20the%20Military/DCAF-PfPC-Teaching-Gender-Military-Ch1-Why-how-gender-is-vital-to-military.pdf

Methodologies/Techniques

- Brainstorming to define diversity and its role in education.
- Discussion examining diverse perspectives in PME.
- Project work to integrate diverse perspectives in design and execution of their course/lesson.
- Discussion of the methods and benefits of bringing diverse perspectives into programmes, courses, readings, discussions, and composition of students and faculty in a classroom setting.
- Role-play or debate to represent different perspectives on a subject matter topic and engage in debriefing on questions of how considering diverse perspectives aids in decision making and builds critical thinking skills.
- Engagement in stakeholder analysis of a particular policy or issue using interviews or a survey. Consider how different groups bring in different perspectives on the same issue/policy. Alternatively, use the results from publicly available surveys (such as eurobarometer, gallup, or pew research) and review how different groups answer the same question.
- Small group project: Assign each of Hostede's cultural domains to consider how that domain impacts teaching and learning in the institution. Consider what instruction might look like in a different cultural environment with significantly different domain values.

Assessments

- Participants will do project work to integrate diverse perspectives (gender, CIVMIL, culture) in design and execution of their course/lesson.

Glossary

- **Gender perspective**: The consideration of gender-based differences between women and men as reflected in their social roles and interactions, in the distribution of power and the access to resources. NATO Bi-Strategic Command Directive 40-1 (Oct 2021).
- **Intercultural perspective**: The intercultural society contains core beliefs to govern relations between people, yet it is not as prescriptive at the level of detail as fundamentalism. It allows for people to grow together and to create and recreate the society within which they live. It privileges civic values that in essence seek to foster competent, confident, and engaged citizenship. Phil Wood and Charles Landry, *The Intercultural City*, (London: Earthscan, 2008), p. 8.

Module Name

3. Active Learning Techniques

Description/ Scope

In this module, participants will identify and apply active learning methods of instruction. Participants will practice the skills they learned and relate them to previous teaching experience both individually and in small groups.

Objectives/ Outcomes

Participants will be able to:

- Explain different active learning techniques.
- Distinguish between active and traditional/passive approaches to learning.
- Evaluate and apply a variety of teaching techniques such as: interactive lecture, case studies, discussion, panels, and collaborative teaching techniques.
- Describe the value of metacognitive reflection.
- Select active learning techniques to achieve lesson learning outcomes.

Resources

- Active Learning. https://poorvucenter.yale.edu/ActiveLearning
- Angelo, T. & Cross, K.P. *Classroom assessment techniques: A handbook for college Teachers* (2nd edition) (San Francisco: Jossey-Bass, 1993).
- Barkley, E., C. H. Major and K.P. Cross, *Collaborative Learning Techniques: A Handbook for College Faculty* (San Francisco, CA: Jossey-Bass, 2014).
- Brame, C. Active learning. Vanderbilt University Center for Teaching. https://cft.vanderbilt.edu/active-learning/
- Brookfield, Stephen V. *The Skillful Teacher*, 3rd. Edition. (London: John Wiley & Sons, 2015).
- Lang, J. *Small Teaching: Everyday Lessons from the Science of Learning* (San Francisco: Jossey-Bass, 2021).
- Problem-based Learning. https://teaching.cornell.edu/teaching-resources/engaging-students/problem-based-learning#:~:text=Problem%2Dbased%20learning%20(PBL),the%20motivation%20and%20the%20learning

Methodologies/Techniques

Discussion of Active v. Traditional/Passive learning examples of the different techniques.

Research on how active approaches improve learning over traditional approaches.

Modeling different kinds of active learning approaches, such as:

- Interactive lecturing (inc. pauses for clarification, polling)
- Formative assessment techniques (e.g., learning checks, minute papers, muddiest point)
- Discussion–guided, large group, Socratic
- Think-pair-share
- Peer review
- Panels and debate techniques
- Case study approach
- Small group discussion and projects
- Problem-based learning/Project-based learning
- Simulations, role play, and wargaming
- Concept mapping

Discussion of the value of metacognitive reflections on learning, with exercises designed to invoke such reflections (for example, ask students to reflect on how they designed their lesson plan, and what about the process worked well or did not work well to gain insight into their learning process).

Assessments

- Participants will match active learning techniques to the given learning outcomes incorporating appropriate active learning and reflection techniques, justifying their choices in using these techniques.

Glossary

(Per Oxford Dictionary, English version online unless otherwise noted)

- **Active learning**: An approach to education that calls on students to actively engage in the learning process by doing activities (active listening, talking, writing, creating, etc) and reflecting on how doing those activities affects their learning.

- **Case study approach**: A process or record of research into the development of a particular person, group, or situation over a period. Students read through case materials and then participate in a guided discussion to answer questions about the case and connect it to other cases or course concepts.
- **Concept mapping**: Students visually depict how different concepts, actors, events, authors, or ideas relate to each other.
- **Formative assessment techniques**: Efforts to give feedback to students while they are in the learning process (as opposed to evaluating their knowledge at the end). Examples include the minute paper, where students take 1 minute to respond to a prompt in writing, and the instructor collects the responses to check learning; the muddiest point, where students write down the concept or idea, they found most difficult to understand, allowing the instructor to focus their review.
- **Metacognitive reflection**: Part of active learning is reflecting on how and what we have learned. Metacognitive approaches refer to students thinking about their own learning, and reflection exercises are ways of enabling them to do so.
- **Panels and debates**: A small group of people brought together to investigate or decide on a particular matter. Typically, students are prompted to consider different sides of the same issue or are assigned to teams to convince other students of the merits of a particular position.
- **Passive learning**: A traditional approach to education following the 'sage on the stage model' where an expert transmits information to a passive audience that listens without prompt to reflect or respond.
- **Peer review**: A formative assessment technique where students provide constructive feedback on the work of their peers.
- **Problem-based learning**: A style of group learning that focuses on learning what is necessary to solve a particular problem or answer a question.
- **Simulations, role play, and wargaming**: Active learning approaches where students engage in scenarios that simulate real-world events, concepts, or theories, often providing an opportunity to move away from abstract discussions and engage in critical thinking, decision making, strategising, and testing of ideas. Games can also be used as review exercises for formative assessment (such as trivial pursuit or jeopardy-style games).
- **Small group discussion**: A small group of students discussing a topic or question at the same time as other small groups.

- **Socratic discussion**: A style of guided discussion where the instructor has a particular endpoint or answer in mind and asks students a series of questions to get them there.
- **Think-pair-share**: A technique where students are asked to think silently about their response to a question or prompt, then pair up to discuss with another student, and then share their conclusions with the larger class.
- **Transformational learning** is the process of deep, constructive, and meaningful learning that goes beyond simple knowledge acquisition and supports critical ways in which learners consciously construct meaning of their lives.

Module Name

4. Instructional Design

Description/ Scope

This module focuses on the instructional design aspects of developing a lesson, a course, and the curriculum cycle.

Topics include lesson planning based on backward design and curriculum development. Participants create a lesson plan following the backward design model and conduct peer reviews of their colleague's lesson plans.

Objectives/ Outcomes

Participants will be able to:

- Develop and identify learning outcomes, assessments tools, and active learning techniques according to the revised Bloom's Taxonomy to determine learning levels and to ensure consistency in lesson, course, and programme design.
- Explain how the Kolb learning cycle works.
- Create significant learning experiences for students by determining appropriate content and pedagogical methods
    - Consider resources and timing
    - Use active learning and best practices in learning
- Prepare course descriptions
- Analyse and identify prerequisites as needed
- Create a lesson plan

Resources

- Ambrose, Susan A., Bridges Michael WdiPietro Michel, Lovett Marsha C., Norman Marie K., How *Learning Works: Seven Research-Based Principles for Smart Teaching, San Francisco, Jossey Bass, 2010.*
- Bloom's Taxonomy on-line course https://deepportal.hq.nato.int/ilias/goto.php?target=crs_171&client_id=DEEP (available upon registration).
- Fink, L. Dee. *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses. (*San Francisco, Jossey Bass, 2013).
- McLeod, Saul. "Kolb's Learning Styles and Experiential Learning Cycle," accessed April 6, 2022. https://www.simplypsychology.org/learning-kolb.html

Methodologies/Techniques

Individual project work - creating and peer reviewing a lesson plan.

Possible techniques include the following:

- Scaffold assignments to build significant learning experiences that culminate in assessable products
- Create tests, quizzes, and exams
- Develop writing assignments, presentations, and group projects
- Create peer review opportunities
- Give meaningful feedback
- Motivate students and hold them accountable

Assessment

Individual project work - assess a lesson plan using a lesson plan design rubric.

Glossary

- **Backwards design** is a process that educators use to design **learning experiences** (https://www.edglossary.org/?s=learning+experiences) and instructional techniques to achieve specific learning goals. (https://www.edGlossary.org/backward-design/)
- **Curriculum**: A curriculum is a specific learning programme, a range of courses that collectively describes the teaching, learning, and assessment materials available for a given course of study. Creating a curriculum inheres in the need to provide learners with a road map of what they can expect to learn and a sense of how their learning is organised and structured. Typically, a curriculum has a nested structure, meaning there is an overarching programme within which are several connected parts.

Module Name

5. Assessment and Evaluation

Description/ Scope

This module enables participants to incorporate effective assessment and evaluation in their courses by providing them with relevant knowledge, skills, and tools. It examines assessment and evaluation from multiple perspectives:

- Individual instructors work with students to improve their learning based on specific tools employed in diagnostic, formative, and summative assessment.
- Instructors' work on self-assessment with a view to self-improvement in their teaching.
- Instructors employ peer assessment techniques to ensure growth and alignment to organisational best practices.
- Instructors examine standards of assessment and evaluation for ensuring accountability and benchmarking in teaching.
- Lesson, course, and curriculum evaluation from a stakeholder perspective aimed at quality assurance.

All the above are to be included within the larger framework of collecting data to inform decisions as to curriculum updates and educational programme continuation/ augmentation/modification.

The module enables the participants to identify performance standards, develop key performance indicators, select relevant instruments for monitoring and evaluating students', instructors'/faculty's progress, and achievement toward set goals, as well as the alignment of curricula, educational, and training programme goals to the institutional mission and vision.

The rubric is one tool participants will develop with a view to aligning and standardising assessment and evaluation practices. The module identifies the differences between direct and indirect assessments and how to use them together. It explains the concept of transfer of learning and examines ways of measuring this transfer.

Objectives/ Outcomes

Participants will be able to:

- Identify and incorporate appropriate assessment and evaluation tools in their courses and curriculum based on identified learning outcomes.

- Demonstrate the use of formative and summative assessment tools in classroom teaching and curriculum development.
- Use diagnostic assessment tools.
- Articulate the difference between direct and indirect assessment and how they should be used together.
- Explain the concept of learning transfer and how it can be measured.
- Build appropriate assessment instruments to measure student learning.
- Use feedback from assessments to improve their curriculum in the future.
- Construct appropriate rubrics for student, instructor, curriculum, and programme assessment.

Resources

- Banta, Trudy W., and Charles Blaich, "Closing the Assessment Loop," *Change: The Magazine of Higher Learning,* 43:1, 22 — 27. https://www.gvsu.edu/cms4/asset/EF4BB85F-CE60-13B2-48C316794B210EBA/closing_the_assessment_loop.pdf
- Banta, T., James, E., and K. Black. *Principles and Profiles of Good Practice* (San Francisco: Jossey Bass, 2009).
- Diamond, Robert M, Designing and Assessing Courses and Curricula: a Practical Guide, (San Francisco: Jossey-Bass, 2008).
- Isaacs, T., Catherine Zara, Graham Herbert, Steven J. Coombs & Charles Smith: *Key Concepts in Educational Assessment* (SAGE Publications Ltd, 2013).
- Lape, Beth, "Assessment and Evaluation as Tools for Improvement," Chapter 8 in DCAF and PfPC's *Handbook on Teaching Gender in the Military* (Geneva: DCAF and PfPC, 2016), https://www.dcaf.ch/sites/default/files/imce/Teaching%20Gender%20in%20the%20Military/DCAF-PfPC-Teaching-Gender-Military-Ch8-Assessment-evaluation.pdf
- Martin, J., and R.A. Collins, "Formative and Summative Evaluation in the Assessment of Adult Learning." In V. Wang, Ed., *Assessing and Evaluating Adult Learning in Career and Technical Education* (Hangzhou, China: Zhejiang University Press and Hershey, PA: IGI Global, 2009), 153-171.
- Secolsky, Charles and Brian D. Denison, eds., *Handbook on Measurement, Assessment, and Evaluation in Higher Education* (Routledge, Taylor & Francis Group: 2011).

- Walvoord, B. *Assessment Clear and Simple: A Practical Guide for Institutions, Departments, and General Education* (San Francisco: Jossey-Bass, 2004).
- Wang, V. A*ssessing and Evaluating Adult Learning in Career and Technical Education* (Hangzhou, China: Zhejiang University Press and Hershey, PA: IGI Global), 153-171.

Methodologies/Techniques

- Conduct a discussion with participants on assessment and evaluation of educational and training programmes, faculty, and students in their institution from the perspective of the following questions: who/by whom? Why? What for? What? How? When and how often? Related to student learning and assessment and evaluation, ask questions such as: What does it look like to them? How do they know that their students are achieving the outcomes (evidence) that they (the instructors) have identified as necessary in their individual discipline? Ask them how they might collect such evidence. Probe deeper into how they conduct assessment in their institution and if it gives everyone the information they require. Go to a think – pair – share and ask the students how these assessments might be used in their individual classes. Discuss questions related to who evaluates lessons, courses, curricula, programmes at their institution and how that reflects in the tools chosen for student assessment and teacher evaluation.
- Provide a presentation about assessment and evaluation, identifying the differences between formative and summative and the use of direct and indirect assessments. Discuss teacher/course/curriculum/programme assessment and evaluation best practices. Focus on what positive outcomes these types of assessments can provide for learners and instructors. Provide background on how direct and indirect assessments can be used together to create a more accurate assessment picture. When covering formative and summative assessment, highlight the difference in how they are used and not when they are used.
- Ask faculty members about their experience with establishing criteria for assessment and evaluation and the need to ensure objectivity, fairness, transparency, reliability, and validity. Lead the discussion towards identifying the role of rubrics in assessment and evaluation. Discuss with them what they like or dislike about using this structured approach. Discuss the relevance of teacher standardised performance measurements, key performance indicators for assessment and evaluation as part of educational and training programmes quality assurance goals.

- Review the use of rubrics from the Content and Lesson Planning Module. As a wrap up, emphasise that what their students do with knowledge is as important as their initial learning. Highlight the usefulness of rubrics for guiding individual efforts of instructors to improve their teaching approaches, enabling managers/deans/peers to objectively assess and evaluate faculty, and the relevance of the data obtained for programme/curriculum decision-making.

Assessments

- Participants incorporate appropriate assessment and evaluation tools (rubric included) in their courses and curriculum.
- Participants develop self-assessment and peer assessment criteria and apply those to assess and evaluate their own courses and their peers' courses.
- Participants compare a generic checklist of activities used to evaluate curriculum with their institutional practices to make informed proposals regarding an integrated approach towards evaluating curriculum.

Glossary

(Per Oxford Dictionary, English version online unless otherwise noted)

- **Assessment**
  - The action of assessing someone or something.
  - The wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill acquisition, or educational needs of students. (Source: https://www.edGlossary.org/assessment/)
- **Course evaluation**
  - A paper or electronic questionnaire, which requires a written or selected response to a series of questions to evaluate the instruction of a given course. It is a common means to produce useful feedback which the teacher and school can use to improve their quality of instruction. (Source: https://ctl.wustl.edu/Resources/Glossary-of-pedagogical-terms/)
- **Course redesign**
  - Course redesign involves redesigning a course so that it has demonstrable and measurable goals that align with teaching strategies and assessment mechanisms. It is recommended that you select strategies that encourage active learning and monitor student progress so that you can provide

support to students who require it. (Source: https://ctl.wustl.edu/Resources/Glossary-of-pedagogical-terms/)

- **Curriculum assessment**
  - Curriculum assessment is a process of gathering and analysing information from multiple sources to improve student learning in sustainable ways. (Source: https://ctlt.ubc.ca/files/2010/08/HbonCurriculumAssmt.pdf)
- **Diagnostic assessment**: Using multiple measures and reports to identify student strengths and needs in specific skill-areas so that teachers can provide instruction to address learning needs.
  - Guides academic, curricular, and instructional decisions because there is a better understanding of what a student does or does not know in relation to specific learning goals. (Source: https://www.illuminateed.com/blog/2020/11/diagnostic-assessment)
- **Evaluation**: The making of a judgment about the amount, number, or value of something. For example, measurement of items other than student learning in an educational setting.
- **Formative assessment**
  - A wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course. (Source: Retrieved from https://www.edGlossary.org/formative-assessment/)
  - The process of providing non-summative feedback to students during the learning process. These are often low stakes activities that allow the instructor to check student work and provide feedback. An instructor writing comments and suggestions on a draft version of a paper is an example of formative assessment (Weimer 2013). (Source: Retrieved from https://ctl.wustl.edu/Resources/Glossary-of-pedagogical-terms/)
- **Indirect assessment**
  - Assessment methods examine the perspectives of various stakeholders on teaching and learning in order to glean insights on the learning process (the how and why).
  - Examples: student self-appraisals of learning, satisfaction surveys, peer review by faculty, focus groups (e.g. with students, alumni, community partners, employers of graduates). (Source: https://assessment.lafayette.edu/about/understanding-assessment/direct-and-indirect-methods/)

- **Stakeholder**
  - In education, the term stakeholder typically refers to anyone who is invested in the welfare and success of a school and its students, including administrators, teachers, staff members, students, parents, families, community members, local business leaders, and elected officials such as school board members, city councilors, and state representatives. Stakeholders may also be collective entities, such as local businesses, organisations, advocacy groups, committees, media outlets, and cultural institutions, in addition to organisations that represent specific groups, such as teachers' unions, parent-teacher organisations, and associations representing superintendents, principals, school boards, or teachers in specific academic disciplines. In a word, stakeholders have a "stake" in the school and its students, meaning that they have personal, professional, civic, or financial interest or concern. (Source: https://www.edGlossary.org/stakeholder/)
- **Summative assessment**
  - Used to evaluate student learning, skill acquisition, and academic achievement at the conclusion of a defined instructional period—typically at the end of a project, unit, course, semester, programme, or school year. (Source: Retrieved from (https://www.edGlossary.org/summative-assessment/)
  - The process of measuring a student's learning at the conclusion of a course (or a portion of the course). Summative assessments are typically associated with grades and can take the form of quizzes, exams, or papers. (Source: Retrieved from https://ctl.wustl.edu/Resources/Glossary-of-pedagogical-terms/)
- **Teacher's evaluation**
  - Accurate appraisal of the effectiveness of teaching, its strengths, and areas for development, followed by feedback, coaching, support and opportunities for professional development. It is also essential to celebrate, recognise and reward the work of teachers. "(Source: Santiago, P., & Benavides, F. "Teacher Evaluation. A Conceptual Framework and Examples of Country Practices. Presented at the OECD-Mexico Workshop *Towards a Teacher Evaluation Framework in Mexico: International Practices, Criteria and Mechanisms*, held in Mexico City on 1-2 December 2009. (Retrieved from http://www.oecd.org/education/school/44568106.pdf)
- **Transfer of Learning**
  - The ability of a learner to successfully apply the behavior, knowledge, and skills acquired in a learning event to the job, with a resulting improvement in job performance. (https://trainingmag.com/improving-learning-transfer)

Module Name

6. Enhancing Education through Emerging Technologies

Description/ Scope

This module affords the opportunity to collaborate and consciously reflect on emerging technologies, focusing on social media and other computer-based resources (online and offline) for education and training. Additionally, the participants will practice creating appropriate interactive online learning for adult learners in support of democratic values of defence education for reform.

Objectives/ Outcomes

Participants will:

- Identify, develop, and defend ways faculty can improve learning environments by exploring:
  - Emerging technologies evaluation and tools including social media learning and other technology-based tools (online and offline).
  - Multiple approaches to online teaching-learning (e.g., blended learning solutions, flipped classroom, online tutoring etc.) in the framework of lesson planning, by respecting principles of eLearning.
- Explain the opportunities and challenges of emerging technologies in faculty development and curriculum design (including resource requirements, faculty requirements, interaction requirements, classroom management, faculty confidence, etc.)
- Use new approaches to evaluation process and tools, focusing on various new forms of content delivery (including social media, Learning Management Systems, etc.)
- Demonstrate the use of the new approaches to promote student-centered learning (including digital literacy and the critical review of online resources).

Resources and References

- Computer and internet access, access, and use of Learning Management System (LMS) such as Blackboard, Moodle, ILIAS / PfPC / DEEP LMS, M7-126 (NATO eLearning Course), PfPC ADL WG, etc.
- Pritchard, Alan. *Effective Teaching with Internet Technologies* (London: Paul Chapman Publishing, 2007).
- Stein, Jared, and Charles R. Graham (Eds.) *Essentials for Blended Learning.*

- *A Standards-Based Guide.* (New York: Routledge, 2020).
- Shank, Patti, ed., *The Online Learning Idea Book*. (San Francisco: John Wiley & Sons, Inc, 2007).
- The NATO ADL Handbook - Guidelines for the development, implementation and evaluation of Technology Enhanced Learning.
- Walcutt, J.J. & Schatz, S., eds., *Modernizing Learning: Building the Future Learning Ecosystem*. (Washington, DC: Government Publishing Office, 2019).

Methodologies/Techniques

Online and resident instruction, hands-on experience, open discussions, journals (on faculty success), online self-paced courses, online resources.

Assessments

- Construct a SWOT (Strengths, Weaknesses, Opportunities and Threats)-style matrix to analyse the impact of emerging technologies tools on institutional effectiveness.
- Evaluate the outcomes of this analysis and determine appropriate implementation for their course.
- Evaluate existing online resources such as self-paced courses.

Glossary

(Per Oxford Dictionary, English version online unless otherwise noted)

- **Advanced Distributed Learning (ADL)**: A government initiative that bridges across Defence and other Federal agencies to encourage collaboration, facilitate interoperability, and promote best practices for using distributed learning to provide the highest-quality education, training, informal learning, and just-in-time support; tailored to individual needs and delivered cost-effectively, anytime and anywhere, in order to increase readiness, save resources, and facilitate interorganisational collaboration. (https://www.adlnet.gov/about)
- **Asynchronous**, as it relates to online learning, means events that are not time coordinated. It means that learners are using the materials and communicating at different times from other learners. Examples: email, threaded discussion, higher-education online courses, self-paced online courses. Each learner can use, read, and respond at a time of his or her own choosing (Shank, 2007, 347).
- **Blended learning** refers to a combination of learning methods (including but not limited to online and face-to-face instruction). The advantage of blended

learning is that it can employ the best features of each delivery method—for example, the immediate feedback that happens in classroom learning and the self-paced exploration that's possible in asynchronous online learning (Shank, 2007, 347).

- **eLearning**: Learning conducted via electronic media, typically on the Internet.
- **mLearning**: Short for mobile learning "Leveraging ubiquitous mobile technology for the adoption or augmentation of knowledge, behaviors, or skills through education, training, or performance support while the mobility of the learner may be independent of time, location, and space." The Advanced Distributed Learning (ADL) Initiative's Mobile Learning Decision Path report (p. 5). See https://adlnet.gov/assets/uploads/MLDP-Report.pdf
- **Flipped Classroom**: One where students are introduced to content at home, and practice working through it at school. In this blended learning approach, face-to-face interaction is mixed with independent study via technology. https://teachthought.com/learning/the-definition-of-the-flipped-classroom/
- **ILIAS**: An open-source Learning Management System that holds the distinction of being the first open source LMS that is SCORM 1.2 and SCORM 2004 compliant. (https://elearningindustry.com/top-open-source-learning-management-systems)
- **Learning Management System** (LMS) is an application that handles earning administrative tasks such as creating course catalogs, registering users, tracking users within courses, recording data (like test scores) about learners, and providing reports (Shank, 2007, 349).
- **Massive Open Online Courseware** (MOOCs): An online distance learning course for which people can typically enroll free or for a small fee, without qualification requirements, and which is therefore open to much larger numbers than conventional residential study courses.
- **Online courses**: Network-enabled transfer of skills and knowledge using a computer.
- **Online tutorials**: An account or explanation of a subject, printed or on a computer screen, intended for private study.
- **SWOT analysis/matrix**: SWOT is an acronym for Strengths, Weaknesses, Opportunities and Threats. By definition, Strengths (S) and Weaknesses (W) are internal factors over which you have some measure of control. Also, by definition, Opportunities (O) and Threats (T) are external factors over which

you have essentially no control. (https://www.managementstudyguide.com/swot-analysis.htm)

- **Synchronous**, as it relates to online learning, refers to events that are time coordinated or simultaneous. It means people are "attending" and using the materials at the same time as others, even though they may be in different locations. Examples: chat, instant messaging, Web conferencing (Shank, 2007, 349).

Document Review

This FDCG will be reviewed on an annual basis for relevancy and currency. Feedback from Master Instructors and partner institutions that use this document is encouraged and valued.

APPENDIX I

PFPC - EDWG - Educators Faculty Development Group – Other Faculty Development Programmes to Supplement Local Programmes

PfPC EDWG Educators Faculty Development Group

Faculty Development Programmes:

1) Foundational Faculty Development Programme (FFDP)
2) Master-Instructor Programme (MIP)
3) Other Programmes/Courses/Workshops:
    a) "Bricks to Clicks"
    b) Creative and Critical Thinking for Faculty Development

1. Foundational Faculty Development Programme (FFDP)

Programme Scope

This programme enhances faculty capability to design and deliver instruction based on educational best practices and democratic values intended to enhance student critical thinking skills. It encompasses the main topics of active learning and allows the participants to choose the areas to be addressed within the next workshops for faculty development.

This programme consists of Introduction and three modules ("Student Centered Active Learning Methods", "Assessment and Active Learning", "Lesson Planning and Curriculum Design"). Each module is planned for 4-5 full working days or 10 3-hour virtual workdays. These modules are designed using a building block approach.

This programme is taught face-to-face (f2f) or via the Internet with synchronous sessions using Zoom to ensure its active learning basis. All the modules are structured and conducted according to active learning principles with discussions, hands-on experiences, and small group activities.

Programme Outcomes

By the end of the programme the participants will be able to:

- APPLY: Identify, select, and implement best practices in instructional design, development, and assessment in defence education.
- ANALYSE: Compare and contrast what education methods and practices are valuable and usable in countries for defence education reform.
- EVALUATE: Analyse progress and challenges in implementing student centered active learning approaches.

Participants

25-30 participants (for DL – up to 12 participants).

Prerequisites for the potential participants (prior knowledge needed to be successful):

- The participants must be educators with prior teaching experience.
- The participants must have school approval for the programme participation.
- The participants must have access to a web camera and a microphone for synchronous sessions (if conducted virtually).

Programme Content

Adult learning, student-centered learning, active learning methods, motivation, assessment, feedback, backward planning, instructional design (learning outcomes – assessment – methods), blended learning, e-learning, critical thinking, curriculum design, etc.

2. Master-Instructor Programme (MIP)

Programme Scope

MIP aims at building partner PME schools' self-reliance and sustainable capacity to create and deliver quality curriculum based on modern techniques by educating the selected master instructor (MI) candidates who will have the partner institution's responsibility to develop teaching colleagues in a continuous cycle of curriculum and teaching improvement.

It focuses on adult learner-centered, outcome based, active learning modern pedagogical techniques. It emphasises succession planning.

The programme consists of four phases:

MIP 1	*I do*	Review of Best Educational Practices
MIP 2	*We do*	Course Design, Assessment and Mentoring
MIP 3	*They do*	Student Teaching with Peer Observation and Evaluation
MIP 4		Sustainment of Capability and Institutional Commitment

Programme Outcomes

By the end of the MIP, candidates will be able to:

- Design and execute an FDP to their school's instructors that supports the concepts of students' interactive learning based on current adult learning principles and best practices aligned with the institution's needs.
- Apply and advise the faculty on the content and resources on adult learning, student-centered learning, assessment and evaluation, programme, course and lesson planning, curriculum development and e-learning.
- Observe and evaluate the faculty execution of the learning process.
- Coordinate with other faculty in the subject area to develop internal quality assurance.
- Advise the leadership on best practices in PME to gain their support.
- Plan for sustainability of the faculty development programme.

Participants

Up to 12 participants.

Prerequisites for the potential participants:

- Appointed and supported by the institution's leadership.
- Preferred minimum of 2 years left in their faculty position before reassignment.
- Understand the institution's vision, mission, goals, and its educational culture and needs.
- Capacity to educate their own faculty in the basics of current adult learning principles and best practices.
- Previously participated in DEEP FDP/equivalent (desirable).
- Routinely use the professional network when searching for sources and materials necessary for the programme.
- Interested in career long learning and modern pedagogical techniques.
- Capacity to develop and implement a strategic plan to ensure sustainable faculty development at their home institution.
- Excellent communication skills with faculty & leadership.
- MIP Participant Prior Knowledge and Skills
    - Adult, Active, Experiential, Affective learning
    - Backwards Design
    - Lesson Planning
    - Curriculum Design
    - Learning Outcomes
    - Bloom's Revised Taxonomy
    - Evidence Based Learning
    - Diagnostic, Formative, Summative Assessments
    - Evidence Based Evaluation
    - Student Centered Learning
    - Align Lesson to Course to Programme to Institutional Mission
    - Constructing Rubrics
    - Safe Learning Environment

- Motivation
- Student's Responsible for Own Learning & Learning of Others
- Active Learning Methods

Programme Content

Phase 1 (2-person MIP Team, 5 days, 9 – 12 MIP participants):

- Baseline assessment of current classroom pedagogy.
- Provide tailored refresher education where needed.
- Develop/present a detailed lesson collaboratively then individually.
- Develop an outline of an FDP course to be the basis for Phases 2 and 3.

Homework: Participants create detailed FDP, eight to ten 90-minute lesson plans for FDP in English, and e-send to MIP lead 2 months *prior* to Phase 2.

Phase 2 (MIP Team, 5 days, 9 – 12 participants who attended MIP1):

- Each MIP participant conducts their FDP lesson(s) to class.
- Class and MIP team discuss and critique via formative feedback.
- MIP team recommend to DEEP leadership to continue/not continue.

Homework: Each participant updates lessons for FDP in native language (and English if required) and sends them + all supporting materials to MIP lead 2 months *prior* to Phase 3.

Phase 3 (MIP Team, 5 days, 9 – 12 participants who attended MIP1 & MIP2):

- MIP Team
  - Observes MIP participants teaching the FDP to their institution's faculty.
  - Conducts summative evaluation to determine programme sustainability.
  - Identifies the MIP participants who earned MI candidacy to DEEP leadership.

Homework: Finalise the FDP (all lesson plans, materials, etc.). Each candidate prepares an individual development plan (IDP) for personal faculty development to include desired skills/self-assessment, short-term and long-term career goals, and an implementation plan. E-send the FDP and the IDP to the MIP lead one month *prior* to Phase 4.

At the end of Phase 3 the MIP participants who successfully complete the programme receive certificates of completion.

Phase 4 MIP Sustainment: (2-person MIP Team, one team visit every 12-18 months up to 5 years):

Evaluate the partner's institutional capacity to sustain and implement a current FDP for their own faculty members and its ability to share their institutional experience with peer institutions.

The MIP Team will conduct a summative evaluation to determine programme sustainability by evaluating the:

- MIP candidates conducting the FDP course and their own subject courses.
- Faculty graduates of the MIP FDP course teaching their subject courses.
- Institution's active participation in the national/regional/multinational joint community of practice.
- Leadership's support at all levels in implementing current best practices in education, adult learning, and faculty development.

The MIP provider team will also:

- Mentor and coach the MIP candidates on the latest trends in adult learning.
- Monitor and assess MIP instructor progress toward their individual professional goals and identify further areas of growth and development.

At the end of Phase 4:

- Visit 1, MIP candidates who demonstrate their success in teaching a FDP receive certification as Master Instructors.
- Visit 3, a successful partner school will receive designation as a certified MIP institution valid for 10 years.

3. Other Programmes/Courses/Workshops

3.a. "Bricks to Clicks"

Course Scope

This course is designed for PME educators and aims at enhancing a faculty member's capability to design and deliver instruction based on student centered and active learning principles in a virtual environment, and to convert a f2f instruction into DL format using a LMS and other digital tools.

The course itself has a hybrid nature since it includes synchronous and asynchronous self-pace sessions. Special focus is on how to select DL assessment tools and instructional strategies to meet the LOs of a lesson/course while converting the latter into DL format.

The faculty/participants will practice several popular instructional strategies in a virtual environment, discuss how to convert f2f instruction into DL, work in small groups, design a lesson plan and conduct a DL mini lesson based on active learning principles.

The course consists of 1 – 3 workshops, from 36 hours (synchronous and asynchronous) depending on the participants prior knowledge and skills.

Course Outcomes

By the end of the course the participants will be able to:

- Convert an f2f instruction into a DL format regarding active learning and adult learning principles.
- Teach interactive, student-centered lessons using various digital tools in a virtual environment.
- Justify their own choice of DL instructional strategies.

Participants

Up to 12 participants.

Prerequisites for the potential participants:

- Content Knowledge
  - The course participants must be educators with prior teaching experience.
  - The course participants must have their leadership's approval for course participation.
  - The course's working language is English.

- IT Capability
  - The participants must have access to a web camera and a microphone for synchronous sessions.
  - The participants must log-in to Ilias with their password.
  - The participants must access BigBlueButton.

Course Content

DL assessment tools, DL instructional strategies to meet the LOs of a lesson/course while converting the latter into a DL format.

3.b. Creative and Critical Thinking for Faculty Development

Workshop Scope

This workshop aims at creating a community of practice for MIP graduates, enhancing their capability to design and deliver instruction based on educational best practices and democratic values in Defence Education for Reform. It addresses learners' creative and critical thinking development.

This workshop is conducted via the Internet with two synchronous sessions using BBB. The workshop is structured and conducted according to active learning principles with discussions, hands-on experiences, and small group activities.

Workshop Outcomes

By the end of the workshop, the participants will be able to:

- APPLY: Identify, select, and implement best practices in developing learners' creativity and critical thinking in the learning process.
- ANALYSE: Compare and contrast what methods and practices of developing learners' creativity and critical thinking are valuable and usable in PfP countries' education for reform.
- EVALUATE: Analyse progress and challenges in implementing student centered active learning approaches based on the MIP graduate's experience.

Participants

Up to 12 participants.

Prerequisites for the potential participants:

- The workshop participants must be MIP graduates or MIP participants who have successfully completed MIP2.

- The course participants must have their leadership's approval for the workshop participation.
- The participants must have access to a web camera and a microphone for synchronous sessions.
- The participants must access Big Blue Button.

Workshop content

- Creative thinking.
- Critical thinking.

APPENDIX II

Formats for a Faculty Development Programme

As MIs design their faculty development programmes, they may consider including some of the following items in their plans as institutional needs and resources allow.

Courses and Workshops for Faculty

- New faculty course or workshop to onboard new faculty into principles of teaching. This can be an annual event at the institution to ensure faculty are familiar with the curriculum, adult and active learning techniques, institutional norms and processes, and classroom technology.
- Regular meetings of a small group of faculty to conduct in-depth discussion of a particular topic or book on teaching. This can be held entirely in person, online, or a hybrid of the two.
- Periodic workshops led by experts on different topics in faculty development (for example, adult learning, how to lead discussion, designing active learning activities, how to provide effective feedback, interactive lectures, diverse perspectives in the classroom, teaching online).
- Create an annual conference or event where all faculty can share their best practices in teaching with each other.

Feedback Programmes for Faculty

- Observe faculty teaching and provide formative feedback for them to reflect on.
- Create a peer observation programme where faculty are trained to observe each other and provide formative feedback.
- Conduct a student-led session to get mid-term, anonymised, group feedback on instructor performance.
- Create a teaching award programme to recognise excellent teaching at the institution.

Faculty Consultations

- One-on-one consultations with individual faculty to work on classroom needs, such as teaching with technology, refining a lesson plan, or designing an active learning exercise on a particular topic. You can also help them identify areas for future faculty development for them.

- Consult with department and institutional leadership on topics such as curriculum, teaching methodologies, and assessment.

Providing Resources to Faculty

- Newsletters–create a regular newsletter for faculty with teaching tips, resources, and any teaching-related news, including upcoming conferences and faculty development activities.
- Library of resources–build and share a library of resources (physical or electronic) on different teaching topics that faculty can borrow and consult.

MASTER INSTRUCTOR PROGRAMME PROJECT TEAM

Name	Nationality	Institution
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Dr. Aura Codreanu	Romania	National Defence University
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Multinational Team of Academics group photo during EDWG meeting at the College of Education, Oral Roberts University, Tulsa, 2017.

Multinational Team of Academics group photo during EDWG meeting at the College of Education, Oral Roberts University, Tulsa, 2018.

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EPILOGUE

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Multinational Team of Academics group photo during EDWG meeting in Reichenau, Austria, April 2022.

Websites and References:

PfP Consortium:
www.pfp-consortium.org

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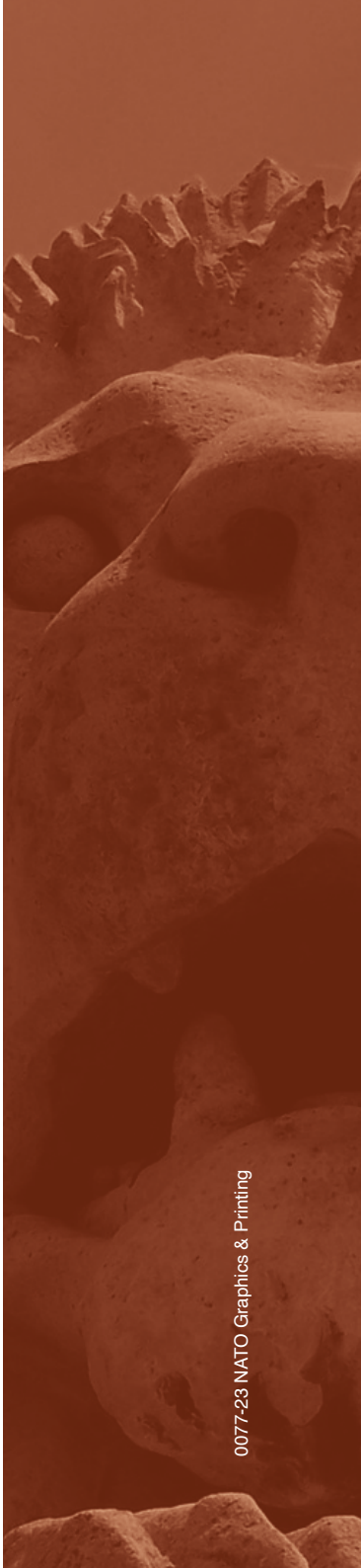

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