



Non-Commissioned Officer School Instructor Development

REFERENCE CURRICULUM



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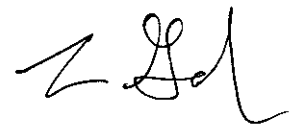
REFERENCE CURRICULUM



A strong, vibrant, innovative Non-Commissioned Officer (NCO) Corps is the hallmark and engine of successful, western, modern, democratic militaries. Since 2009, as part of the NATO Defence Education Enhancement Programme (DEEP), NATO's Non-Commissioned Officer (NCO) professional development teams have assisted partner nations through training and education to enhance the capabilities and effectiveness of Professional NCO Corps. In recent years, the importance of professional NCOs as the backbone of a modern military has been proven essential, whether on the battlefield in wartime or in training national forces during peacetime.

In response to growing demand, we are introducing the NCO School Instructor Development Reference Curriculum. The goal of this curriculum is to serve as a reference document for Allied and partner countries intending to establish, develop, or supplement professional development courses for instructors at NCO schools. It intends to complement two other references - the NCO Professional Military Education Reference Curriculum (2014) and the NCO Corps Professional Development Reference Guidance (2020) - designed to advance holistic NCO professional development.

I am confident that this latest addition will help promote development of even stronger NCO Corps across the Alliance and NATO's partners. My sincere thanks to all of those that have contributed generously of their time and expertise, especially during this difficult period in our history, to make this document possible.



Tom Goffus
Assistant Secretary General
Operations Division

About this Document

Before describing the structure of this document and how it ought to be used, it is instructive to say something about its underlying rationale. This document is the result of the best intentions of a multinational team of active and retired Senior NCOs, and civilian academics (See pgs 105-107 in the curriculum for the list of names) drawn from 16 countries. This reference curriculum supports instructing excellence and professionalism through purposeful development of instructors endowed with the requisite knowledge, skills, attributes and attitudes to enhance learning in NCO education and individual training (E&IT) institutions. Typically, every document has an underlying reason for its existence and this one is no exception.

I. AIM OF THIS DOCUMENT

The aim of this document is modest. It does not pretend to be exhaustive, nor does it purport to be the last word on the development of instructors at NCO E&IT institutions. Rather, this document aims to serve as a reference, a starting off place, for individuals or organisations in partner countries and NATO member states looking to establish, develop or supplement the development of instructors at NCO schools. It is not intended to be adopted lock-step but rather to be adapted to fit particular national needs and aspirations. As a reference document, this curriculum can serve to increase greater intellectual and professional interoperability across the NCO corps of each partner country as well as between partners and NATO.

II. INSTRUCTOR PROFILE

For most people in the NCO school system, the instructor is the face of training, and in some jurisdictions maybe referred to as “trainers”. In other environments, they may be referred to as teachers, facilitators, tutors, coaches or other titles. Regardless of the name employed individuals going by those titles all share the key role of working directly with others to facilitate and enhance the overall learning process and experience. NCO professional development that occurs in E&IT institutions is a mix of training and education. There-

fore, the instructors need a combination of competencies and characteristics typically associated with trainers and educators.

Instructors must maintain expertise within their occupational specialty and strive to develop themselves and their subordinates. To help others learn, instructors do the following things: create effective instructional environments; train and coach members in acquiring the knowledge, skills, attributes and attitudes required to achieve professional competence and personal growth, communicate effectively and employ appropriate technologies to improve the efficiency and effectiveness of training and education. Instructors are responsible for a wide array of learning - from general military studies and technical skills to physical fitness training. Regardless of job roles and domains of practice, instructors' perceived need for developmental growth is largely shaped by a professional identity that values high standards of performance and lifelong development. Enhancement of instructor competencies occurs through professional practice, training, education and mentored experiences.

There are a variety of instructional techniques available to instructors. Whether training in a unit or serving at a formal school, instructors must be comfortable with the different techniques of instruction to include the following: periods of drill; formal or informal lectures; facilitating guided discussions and overseeing practical exercises. In addition, they will learn how to do the following: select instructional techniques, customise lesson plans that have been prepared by others and assess learner performance. Furthermore, instructors will coach learners in the development of their skills and are able to apply interactive instructional techniques. Finally, instructors may also serve as counsellor or advisor to learners and must understand the support system available to learners and direct them appropriately.

The fresh perspective and lessons learned from the 2020-22 COVID-19 pandemic highlighted the need for instructors to adapt and enhance their capacity to deliver instruction in a variety of settings to include online and blended.

III. SCHOOL CADRE (INSTRUCTOR) DEVELOPMENT SYSTEM

Instructor development in the military has a long and complex history that can be traced back to the earliest days of organised military training. In ancient times, military instructors were often experienced warriors who passed down their knowledge to new recruits through practical, hands-on training. This type of instruction continued throughout much of the medieval and early modern periods, but it was not until the 19th century that formalised military instructor development programmes began to emerge.

Over the years, military instructor development programmes continued to evolve and expand in response to changing military needs and advances in education theory and practice. In the early 20th century, for example, the military began to place greater emphasis on standardised training and evaluation, and developed a variety of new instructional techniques and technologies to support this goal.

In the post-World War II era, military instructor development continued to evolve and adapt to changing circumstances. The increasing use of technology in training, for example, led to the development of new instructional methodologies like computer-based training and simulation-based training. And as the military became more diverse and inclusive, there was a greater emphasis on developing instructors who could effectively teach and lead diverse groups of soldiers.

Today, military instructor development remains a vital component of military training and education. And as military needs continue to evolve, so too will the programmes and techniques used to develop the next generation of military instructors. The increased complexity of learning programmes requires a cadre of highly skilled education and training professionals. This curriculum is designed to provide a progression of learning experiences that will enable instructors to develop from novice instructors to experts in training and education. As such, three competency levels – basic, advanced and master – have been articulated in this reference curriculum.



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M 3.3.1 Types of Assessments M 3.3.2 Evaluate Lesson Delivery	M 3.3.1 Rubrics M 3.3.2 Course Evaluations M 3.3.3 Instructor Evaluations

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IV. USING THIS 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.

This curriculum makes certain implicit assumptions. The first is that learning will take place in a permissive environment and interrogation will be part and parcel of the learning process and experience. Second, its governance will be decidedly pluralistic so that learners have some input in shaping future iterations of the curriculum. Furthermore, the success of this curriculum is tied to having an effective personnel and promotions system in place as well as an overall strategy for instructor development. Absent such a system and strategy, this curriculum will fall short of expectations.

It is recommended that this curriculum be implemented in a progressive or sequential manner across the three phases and more importantly across the themes within each phase. The themes and their associated blocks have been designed to progress from the basic to the master level and similarly the degree of complexity of the courses under each theme rises across the three phases.

For ease of understanding and alignment within the Euro-Atlantic community and with partner schools we recommend making use of the descriptions below:

Basic Level. This level represents an entry point for developing instructor competencies and other skills that over time enhances instructor effectiveness. More specifically, at this level the instructor is able to develop and deliver a lesson whilst integrating effective instructional techniques in accordance to an approved lesson plan.

Advanced Level. Instructors at this level possess considerable experience in the delivery of a body of knowledge. They design, develop and deliver lessons using highly interactive instructional methods in various environments. In addition, they help learners and other instructors in developing their cognitive skills by providing feedback that is reflective of their performance and actionable in a constructive manner, thereby making them a coach and role model for new instruc-

tors. Furthermore, instructors at this level are able to create a Programme of Classes that includes rubrics to assess learners' performance, and course and instructor quality control tools. Finally, they are able to lead a team in the delivery of an instructional programme via various platforms or media, and in different settings.

Master Instructor. Instructors at this level possess extensive practical and theoretical knowledge of instructing with particular reference to evidence-based learning and evaluation, active learning models and various forms of assessments among others. In addition, instructors at this level transition into roles that manage the instructional system and the institution to include managing execution of the Systems Approach to Training (SAT), implementing and managing instructor development programmes, serving as course director and fulfilling other training management duties.



NCO School Instructor Development Reference Curriculum Project Team Meeting, Budapest, Hungary, February 2022



The "Blue Line"



NCO School Instructor Development Reference Curriculum Project Team Meeting, NATO School Oberammergau, Germany, October 2021



NCO School Instructor Development Reference Curriculum Project Team Meeting, NATO School Oberammergau, Germany, October 2021



BASIC INSTRUCTOR LEVEL (BIL)

At this level, instructors will learn the basics of education theory, instructor responsibilities, creating lesson plans and how to apply effective teaching methods and presentation techniques in the delivery of a body of knowledge. Additionally, instructors will learn how to conduct and assess a period of instruction, evaluate the effectiveness of a lesson and use effective communication skills and tools to support learning.

THEME 1. Foundations/Frameworks

Goal

Facilitating the learning of others is a complex endeavour that requires an understanding of how people learn. The Foundations/Frameworks Theme aims to provide instructors with knowledge of the theories and skills that enable effective instruction.

Description

The Foundations/Frameworks Theme is one of three interrelated themes comprising the knowledge, skills and attitudes that military instructors need. The themes progress from building basic knowledge to applying that knowledge in preparing instruction, followed by the culminating theme that focuses on the delivery of instruction. This progression describes the developmental path instructors may pursue to becoming experts in their profession.

While many NCOs will have some experience training unit members, a deeper understanding of how people learn is necessary in order to become effective instructors. Theme 1 is designed to develop understanding of learning theories; roles and responsibilities of an instructor and communication skills employed by instructors. The theme consists of three blocks: 1) Educational Theories and Frameworks; 2) Instructor Roles and Responsibilities and 3) Effective Communication.

Learning Objectives/Outcomes

- 1) Describe theories and processes that guide the design and delivery of learning.
- 2) Explain the characteristics of successful instructors.
- 3) Explain how the responsibilities of an instructor differ from leading training in an operational unit.
- 4) Assess how communication in an educational environment differs from communicating in an operational unit.

Block 1.1 Educational Theories and Frameworks

*“Tell me and I forget,
teach me and I may remember,
involve me and I learn”*

Benjamin Franklin

Description

This block is intended to help instructors learn how various learning theories and frameworks can guide their teaching practices, and to provide them with the knowledge they need to create engaging, effective lessons that support learner learning and achievement. Instructors that are knowledgeable about various learning theories, the cognitive learning process and cognitive load theory are able to make informed decisions about how best to effectively adapt instruction to meet the needs of learners. In addition to drawing upon the science of learning, instructors need to understand how human motivation influences learning and their role in motivating learners to begin and sustain the learning process. Lastly, this block introduces the basics of the SAT. This instructional design process is used by instructors to accomplish the following things: analyse a learning need, design, develop and implement the solution, and evaluate the effectiveness of the solution.

Learning Objectives/Outcomes

- 1) Describe common learning theories.
- 2) Describe the cognitive learning process.
- 3) Identify strategies to manage each category of cognitive load.
- 4) Describe motivational theories.
- 5) Identify the phases of the SAT.

Issues for Consideration

- a) Why is it useful for instructors to know about learning theories?
- b) Why is important to know about the cognitive learning process?
- c) Why is important to know your audience?
- d) Why does the military use the SAT?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

Angelaki, C. & Mavroidis, I. (2013). Communication and social presence: The impact on adult learners' emotions in distance learning. *European Journal of Open, Distance and E-Learning*, 16I(1), 78-93.

Driscoll, Marcy (2005). *Psychology of learning for instruction* (3rd ed.). Pearson.

Hand-out Praktijkopleider 1.0, Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzorgen van opleidingen. (n.d). Source

Land Warfare Centre (2020). *Handboek verzorger van O&IT 1.1*, Expertisecentrum Opleidingskunde Defensie.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Papert, S. & I. Harel (1991). *Constructionism* Ablex Publishing Corporation.

Quinn, C. (2016, December 23). The Cognitive Science behind Learning. Chief Learning Officer. <https://www.chieflearningofficer.com/2016/12/23/cognitive-science-behind-learning/>



Module 1.1.1 Learning Theories

Description

Learning, broadly speaking, is a change in human behaviour or performance potential that issues from an individual's engagement with the world. Learning theories suggest the conditions and processes that explain how best to achieve learning. These theories set the stage for how one designs, develops and delivers instruction. Each learning theory is based on a set of assumptions and perspectives that inform and explain how learning occurs. Whilst it is not necessary for instructors to have in-depth knowledge of the various theories of learning, however, it is important that they have a general appreciation of their differences and areas of convergence. Additionally, knowledge of learning theories helps to inform and shape the design of learning activities that support a lesson. In closing, this module is designed to expose the instructor at the basic level to common theories of learning.

Learning Objectives/Outcomes

- 1) Identify common learning theories including behaviourism, cognitivism, constructivism.
- 2) Identify instructional situations when each theory may be used.
- 3) Explain the advantages and disadvantages of each theory.

Issues for Consideration

- a) How do newer theories build upon the older theories?
- b) Given that learning is a change in behaviour, should you always use behaviourism?
- c) What theories appear more difficult to implement?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

- Driscoll, M. (2005). *Psychology of learning for instruction* (3rd ed.). Pearson.
- Hand-out Praktijkopleider 1.0, *Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzorgen van opleidingen*
- Land Warfare Centre (2020). Handboek verzorger van O&IT 1.1, *Expertisecentrum Opleidingskunde Defensie*.
- National University. Theories of Learning in Education <https://www.nu.edu/blog/theories-of-learning/>
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- Papert, S. & I. Harel (1991). *Constructionism*. Ablex Publishing Corporation.



Module 1.1.2 Information Processing Theory

Description

Information processing theory is a cognitive learning theory that describes how the brain takes in information and encodes some of that information in long-term memory. Instructors need to understand this process because the way they structure and conduct learning experiences needs to consider some of the challenges inherent in how humans process information. Knowing those challenges and ways to address them will improve the effectiveness and efficiency of learning. Additionally, instructors will learn from this module to value different cognitive processes involved in learning such as perception, attention, encoding, storage and retrieval.

Learning Objectives/Outcomes

- 1) Describe the psychological processes necessary for processing information.
- 2) Identify the limits of working memory and why it is an important consideration for instructors.
- 3) Explain techniques that instructors may use to support information processing.

Issues for Consideration

- a) How does the prior knowledge of learners influence learning?
- b) Do novices and experts process information the same way?
- c) Do various types of learning content require different strategies to support learning?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

Angelaki, C. & Mavroidis, I. (2013). Communication and social presence: The impact on adult learners' emotions in distance learning. *European Journal of Open, Distance and E-Learning*, 16I(1), 78-93.

Anderson, J. R. (2009). *Cognitive psychology and its implications* (7th ed.). Worth Publishers.

Clark, R., Nguyen, F., & Sweller, J. (2005) *Efficiency in learning: Evidence-based guidelines to manage cognitive load*. Pfeiffer.

Driscoll, M. (2005). *Psychology of learning for instruction* (3rd ed.). Pearson.

Quinn, C. (2016, December 23). *The Cognitive Science behind Learning*. Chief Learning Officer. <https://www.chieflearningofficer.com/2016/12/23/cognitive-science-behind-learning/>



Terada, Y. (2017, September 20) *Why Learners Forget and What You Can Do About It*. Edutopia. <https://www.edutopia.org/article/why-learners-forget-and-what-you-can-do-about-it>



Module 1.1.3 Cognitive Load Theory

Description

Cognitive load theory is an instructional theory that builds upon the previous module, information processing theory, by examining how certain kinds of activities and content affect learning. This theory posits that instructors and the designers of learning activities must avoid overwhelming learners' working memory. Managing cognitive load is accomplished by eliminating unnecessary and distracting content, segmenting complex content into manageable chunks, and selecting appropriate learning activities to promote efficient content processing. Instructors must also consider the cognitive load imposed by working with others during learning activities. Social interaction imposes an additional load on working memory that can interfere with learning; however, working in groups also provides the opportunity to distribute the learning load among the group.

Learning Objectives/Outcomes

- 1) Define cognitive load.
- 2) Explain extraneous, intrinsic and germane categories of cognitive load.
- 3) Identify strategies to manage each category of cognitive load.
- 4) Describe how collaborative learning influences cognitive load.

Issues for Consideration

- a) How does prior knowledge of learners influence cognitive load?
- b) In what circumstances do the benefits of collaborative learning outweigh the risks of increased cognitive load?
- c) What signs indicate that learners are overloaded?
- d) How does the use of educational technology influence cognitive load?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

- Expertisecentrum Opleidingskunde Defensie (2020). *Handboek Verzorger Van O&IT 1.1*. Land Warfare Centre.
- Kirschner, P. A., Sweller, J., Kirschner, F. & Zambrano, J. R. (2018). From cognitive load theory to collaborative cognitive load theory. *International Journal of Computer-Supported Collaborative Learning*, 13(2), 213–233.
- Lucassen, M. (2017, September 21). *De cognitive load theory: Belast je de leerling te veel?*. Vernieuwnederwijs. <https://www.vernieuwnederwijs.nl/cognitive-load-theory/>
- Sweller, J., van Merriënboer, J., & Paas, F. (2019). Cognitive architecture and instructional design: 20 years later. *Educational Psychology Review*, 31(2), 261–292.
- Van Merriënboer, J.J.G. & Sweller, J. (2005). Cognitive load theory and complex learning: Recent developments and future directions. *Educational Psychology Review*, 17(2), 147–177.



Module 1.1.4 Motivational Theory

Description

Motivation is one of the most critical factors that influences learner learning. Highly-motivated learners often require less support from instructors. Conversely, unmotivated learners may not successfully learn even when participating in well-designed and effectively delivered learning activities. To overcome motivational barriers, instructors must understand how to help learners begin the learning process, persist and persevere through it, and believe that they can be successful learners. In this module, instructors will learn about motivational theories and ways to foster intrinsic and extrinsic motivation and self-efficacy.

Learning Objectives/Outcomes

- 1) Describe motivational theories.
- 2) Explain ways instructors may support learners' motivation to learn.
- 3) Identify instructor actions that may decrease learners' motivation to learn.
- 4) Describe how instructors may use the Attention, Relevance, Confidence and Satisfaction (ARCS) model when planning lessons.

Issues for Consideration

- a) How much influence do instructors have over learner motivation?
- b) How do under confidence or overconfidence influence motivation to learn?
- c) When may it be beneficial to support extrinsic motivation?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

- Bandura, A. I. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman and Company.
- Clark, R. E. (2005). Research-tested team motivation strategies. *Performance Improvement*, 44(1), 13-16.
- Clark, R. E. (1998). Motivating performance: Part 1--diagnosing and solving motivation problems. *Performance Improvement*, 37(8), 39-47.
- Hattie, J., Hodis, F. A., & Kang, S. H. (2020). Theories of motivation: Integration and ways forward. *Contemporary Educational Psychology*, 61. <https://doi.org/10.1016/j.cedpsych.2020.101865>
- Keller, J. M. (2010). *Motivational design for learning and performance: The ARCS model approach*. Springer.
- Ryan, R. M. & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>



Module 1.1.5 Introduction to System Approach to Training

Description

The field of instructional design and technology was born from many years of cooperation between the military, educational psychologists and researchers. In the late 1950s many of those researchers and psychologist began to view training and training development as a system. This led to creating an integrated set of analysis, design, development, implementation and evaluation procedures that is commonly referred to as the ADDIE process.

Like other allied military training and education establishments, NATO has implemented an instructional design process known as the System Approach to Training (SAT). The SAT includes among other things comprehensive guidelines, techniques and tools for managing the overall requirements and resources necessary for the military education and training system.

In this module, instructors will be introduced to the SAT phases and learn how the SAT influences their work as an instructor.

Learning Objectives/Outcomes

- 1) Define the SAT.
- 2) Describe the activities in the five phases of the SAT.
- 3) Identify the SAT activities that are performed by instructors at the basic level.

Issues for Consideration

- a) Why is important for instructors to know the SAT?
- b) What are the advantages or disadvantages of using systematic approach to creating education and training?
- c) How is the SAT model similar to other problem-solving processes that you use in your military?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

Berchev, D.I & Stefanov, M. (2019). The systems approach to training in the military educational system – Aggregation of integration processes. *Knowledge International Journal*, 30, 1457-1462. <https://doi.org/10.35120/kij30061457B>



Rothwell, W., Benschoter, B., King, K, & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Reiser, R. A. & Dempsey, J. V. (Ed.) (2020). *Trends and Issues in Instructional Design and Technology* (4th ed.). Pearson.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Block 1.2 Instructor Roles and Responsibilities

“The purpose of adult education is to help them to learn, not to teach them all you know and thus stop them from learning”.

Carl Rogers

Description

New instructors often focus most of their attention on delivering instruction, but they must first recognise that their responsibilities encompass more than delivering classes. In some ways, serving as an instructor is similar to how effective NCOs support the professional development and personal welfare of their subordinates in operational units. In addition to delivering a body of instruction, instructors are expected to set and attain standards of performance that exceed the norm. Instructors will begin their workday long before learners arrive to class and long after they have departed. They must spend time preparing for instruction, counselling learners, updating learner records and reflecting on how their performance supports learner development.

Daily reflection should include considering how well instructors have upheld the highest standards of the profession of arms to include ethics and conduct. In addition, as an instructor within an E&IT organisation they must serve as role models and inspire learners to reach the highest levels of learning and performance.

This block consists of the following models: the first focuses on the roles and responsibilities of an instructor. They will consider how those duties differ from their duties in operational units. The second module, examines the characteristics that are necessary to be an effective instructor. The final module considers self-assessment strategies and ways to ensure they uphold the highest standards of performance and instruction.

Learning Objectives/Outcomes

- 1) Explain the instructor roles and responsibilities.
- 2) Apply the core principles of the instructor code of conduct.
- 3) Use self-assessments to improve instructional effectiveness.

Issues for Consideration

- a) How do the instructor responsibilities compare to the general responsibilities performed by all NCOs.?
- b) Why must instructors uphold the highest standards of conduct?
- c) Why may new instructors find it difficult to use self-assessment as a technique for improvement?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

Hand-out Praktijkopleider 1.0, *Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzorgen van opleidingen*.

Land Warfare Centre (2020). *Handboek verzorger van O&IT 1.1, Expertisecentrum Opleidingskunde Defensie*.

Swiss Armed Forces Leadership Training Academy (2020). *Working Aid 70.007E, Leadership*. Swiss Armed Forces College.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

Module 1.2.1 Instructor Roles and Responsibilities

Description

NCOs assigned to operational units often train their subordinates; however, instructors at a military E&IT institution are expected to meet higher standards of performance with regard to facilitating the learning and development of military members. Instructors must fulfil the role of technical expert in the areas they teach as well as mastering instructional techniques. Instructors must also serve as role models committed to coaching, counselling and mentoring learners. Last, instructors must complete administrative requirements such as writing academic performance evaluations and completing administrative actions for learners. In this module, instructors will also examine the competencies that underpin effective instruction and consider ways to develop the skills and knowledge needed to fulfil their duties.

Learning Objectives/Outcomes

- 1) Explain the instructor's responsibilities.
- 2) Compare the instructor roles to the roles NCOs perform in operational units.
- 3) Identify the competencies that are required to be an effective instructor.
- 4) Describe ways to effectively fulfil your role as an instructor.

Issues for Consideration

- a) What instructor responsibilities are the most difficult to fulfil?
- b) How does being a leader in a E&IT institution differ from being a leader in an operational unit?
- c) Why are instructors expected to serve as role models?

Learning Methodology

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References

- Hand-out Praktijkopleider 1.0, *Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzorgen van opleidingen*.
- Klein, J. D., Spector, J. M., Grabowski, B. & de la Teja, I. (2004). *Instructor competencies. Standards, for face-to-face, online, and blended settings*. Information Age Publishing.
- Land Warfare Centre (2020). *Handboek verzorger van O&IT 1.1, Expertisecentrum Opleidingskunde Defensie*.
- Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/ Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

Module 1.2.2 Characteristics of an Instructor

Description

This module examines the characteristics of effective instructors. Great instructors are professionals who are passionate, knowledgeable, and committed to the learner's success. They possess a range of qualities that enable them to effectively communicate information to learners, create a supportive learning environment and adapt their teaching methods to meet the varied needs of learners.

Some of the key characteristics of great instructors include mastery of the subject matter, enthusiasm and passion for teaching, patience and understanding, effective communication skills, flexibility and adaptability, empathy and compassion, and dedication and commitment. These qualities help instructors to create engaging and dynamic learning environments that promote curiosity and interest in the subject matter, and trustful relationships that support learners in achieving their goals.

In many military E&IT institutions, the foregoing characteristics are articulated in an instructor code of conduct. By exploring the characteristics of effective instructors, learners will gain insights into the qualities that make for effective teaching and learning, and will be better equipped to identify and emulate these qualities in their own teaching practice. This module will provide learners with practical strategies for developing the characteristics of great instructors, and will equip them with the tools and knowledge they need to become effective and successful instructors themselves.

Learning Objectives/Outcomes

- 1) Identify the characteristics of effective instructors.
- 2) Explain how each characteristic contributes to being an effective instructor.
- 3) Describe ways to develop the characteristics of a great instructor.
- 4) Describe the core principles of the instructor code of conduct.
- 5) Analyse how an instructor's character affects the relationship between the instructor and learners.

Issues for Consideration

- a) How does instructor behaviour influence learning?
- b) What are the consequences of tolerating instructor misconduct?
- c) Why is it so important for instructors to be viewed as a role model?
- d) How does the attitude of the instructor influence learning?
- e) How can instructors adapt their professional and personal characteristics to the learners?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. Jossey-Bass.
- Brookfield, S. D. (2015). *The skillful teacher: On technique, trust, and responsiveness in the classroom*. John Wiley & Sons
- Hand-out Praktijkopleider 1.0, *Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzorgen van opleidingen*.
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 met-analyses relating to achievement*. Routledge.
- Land Warfare Centre (2020). *Handboek verzorger van O&IT 1.1, Expertisecentrum Opleidingskunde Defensie*.
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

Module 1.2.3 Instructor Self-Assessments

Description

This module is designed to help instructors use self-assessment as a tool for professional development and growth. In addition, this module discusses the benefits of self-assessment, and provides instructors with practical strategies and tools to evaluate their own teaching practices and identify areas for improvement. Furthermore, instructors will learn how to use self-assessments as the basis for creating self-development plans.

Learning Objectives/Outcomes

- 1) Describe attributes of a self-aware individual.
- 2) Explain how self-awareness is used for improving as an instructor.
- 3) Analyse how each self-assessment tool may be used.
- 4) Create a self-development plan.

Issues for Consideration

- a) How does the instructor select the appropriate tool for self-assessment?
- b) What should an instructor do when their self-assessment does not match how others view their performance?
- c) What challenges may an instructor encounter when creating a self-development plan?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

- Brookfield, S. D. (2015). *The skillful teacher: On technique, trust, and responsiveness in the classroom*. John Wiley & Sons
- Department of the Army (2016). *TRADOC Regulation 600-21, Noncommissioned Officer Education System Instructor Development and Recognition Program*.
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- Swiss Armed Forces Leadership Training Academy (2020). *Working Aid 70.007E, Leadership*. Swiss Armed Forces College.

Block 1.3 Effective Communication

*“The art of communication
is the language of leadership.”*

James Humes

Description

Effective communication skills are crucial for instructors because these skills play a critical role in conveying information and ideas effectively to learners. Good communication helps build rapport with learners, clarifies course content and creates a positive learning environment. In addition, it enables the following: effective feedback, classroom management, and facilitates active learner engagement and participation. Being an effective communicator means having the ability to listen, speak clearly and adapt one's message to the audience. Overall, strong communication skills are essential for instructors to achieve their goal of delivering effective education and facilitating learner learning.

This block is designed to help instructors master essential communication skills necessary in a variety of instructional settings. It consists of the following modules: (1) Communication Techniques, which covers the fundamentals of effective communication; (2) Communication Barriers, which explores common obstacles to effective communication and ways to overcome them; (3) Questioning Techniques, which teaches techniques for eliciting information and encouraging active participation in learning and (4) Counselling and Feedback Strategies, which provides strategies for giving constructive feedback when counselling learners.

Learning Objectives/Outcomes

- 1) Use the communication process to support learner learning.
- 2) Identify communication barriers that occur in instructional environments.
- 3) Apply questioning techniques and feedback to support learning.
- 4) Conduct the counselling process with learners.

Issues for Consideration

- a) What are some of the reasons why communicating for instructional purposes differs from communicating in other settings?
- b) What are the challenges of the communicating with learners?
- c) How do you overcome the challenges?
- d) How do you recognise whether a counselling session with a learner is successful?

Learning Methodology

Learning methods may include lectures, guest speakers, video case studies, role playing, blogging, case studies, practical exercises, readings, research, article reviews, small-group exercises, self-reflection and reflective journaling.

References/Readings

- Arădăvoaice, G. (1997). *Communication in the military environment*. Publishing House of the Academy of Higher Military Studies.
- Canadian Forces Training Development Centre (2011). *Guidebook for new Canadian Forces Instructors*.
- Chiru, I. (2011). *Interpersonal communication*. Tritonic Publishing House.
- Greculeac, A., Salciuc L. & Erhan M. (2016), *Counseling for personal development*, George Tofan Publishing House
- Headquarters, Department of the Army (2015). *FM 6-22 Leader Development*.
- Ionescu, M. & Bocoș, M. (2017). *Treatise on modern didactics* (2nd ed.). Parallel 45 Publishing House.
- Pânișoară, I. (2008). *Efficient communication* (3rd ed.). Polirom Publishing House.
- Serb, S. (2011). *Public relations and communication*. Teora Publishing House.
- Swiss Armed Forces Leadership Training Academy (2020). *Working Aid 70.007E, Leadership*. Swiss Armed Forces College.

Module 1.3.1 Communication Techniques

Description

This module discusses some of the basic elements of effective communication to include the following: (1) appreciation of some of the differences between communication in educational and non-educational settings; (2) differences between verbal and nonverbal communication and how each contributes to the overall meaning of a message and (3) encoding, decoding, transmission and reception of messages. Additionally, this module addresses how differences such as culture, race, gender and age can influence communication and affect its effectiveness. At the conclusion of this module, learners will have a better understanding of the basic elements of communication and the tools they need to communicate effectively in a variety of instructional settings.

Learning Objectives/Outcomes

- 1) Describe the factors that affect verbal and non-verbal communication.
- 2) Identify how social differences affect communications.
- 3) Identify non-verbal communication cues.
- 4) Use verbal and non-verbal communication to support learning.

Issues for Consideration

- a) What assumptions may occur during the communication process?
- b) What should instructors do when non-verbal communication does not match the verbal message from a learner?
- c) When is it appropriate to use written or oral communication?
- d) What characteristics of communication that you used in an operational unit may not be effective when communicating with learners?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Arădăvoaice, G. (1997). *Communication in the military environment*. Publishing House of the Academy of Higher Military Studies.

Chiru, I. (2011). *Interpersonal communication*. Tritonic Publishing House.

DeVito, J. (2018). *The interpersonal communication book* (15th ed.). Pearson.
<https://www.pearsonhighered.com/assets/preface/0/1/3/4/0134624440.pdf>



Serb, S. (2011). *Public relations and communication*. Teora Publishing House.

Module 1.3.2 Communication Barriers

Description

The second module in this block, Communication Barriers, examines some of the common obstacles to effective communication in learning environments to include the following: (1) physical barriers - environmental distractions and communication technology; (2) psychological barriers and (3) social barriers such as cultural differences, power dynamics and language. Instructors will learn strategies for identifying and overcoming these barriers including active listening, empathy and adapting one's communication style to the audience. This module will equip learners with the skills they need to navigate communication challenges and ensure that their message is received clearly and effectively.

Learning Objectives/Outcomes

- 1) Identify potential physical, psychological and social communication barriers in learning environments.
- 2) Describe how the power differential between instructors and learners creates barriers to effective communication.
- 3) Interpret how conscious and unconscious bias may hinder communication in an instructional environment.
- 4) Apply strategies to overcome communication barriers.

Issues for Consideration

- a) How can instructors adapt their communication styles to the learners?
- b) How can misinformation impact effective communications?
- c) How can instructors overcome unconscious bias in their communications?
- d) How does power and culture influence effective communication in learning environments?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

DeVito, J. (2018). *The interpersonal communication book* (15th ed.). Pearson.
<https://www.pearsonhighered.com/assets/preface/0/1/3/4/0134624440.pdf>



Pânișoară, I. (2008). *Efficient communication* (3rd ed.). Polirom Publishing House.

Torrington, D., & Hall, L. (1991). *Personnel management: A new approach* (2nd ed). Prentice Hall.

University of Waterloo Centre for Teaching Excellence (2023, May 1). *Effective communication: barriers and strategies*. <https://uwaterloo.ca/centre-for-teaching-excellence/catalogs/tip-sheets/effective-communication-barriers-and-strategies>

Module 1.3.3 Questioning Techniques

Description

This module examines some of the strategies for questioning that instructors can employ to encourage learner engagement and learning. Instructors will explore various questioning techniques such as open-ended questions, probing questions and clarifying questions, and the situations in which they are most effective. The module also covers strategies for encouraging learner led discussions, such as paraphrasing, summarising and reflection. At the conclusion of this module, instructors will understand the different types of questions and techniques that can be used to promote active learner engagement and participation, and will be able to apply these strategies in the classroom to enhance learning.

Learning Objectives/Outcomes

Torrington and Hali (1991, p. 142) have created a useful table in which they identify five barriers to communication: barriers in sending the message, barriers in receiving it, barriers to understanding, acceptance, and barriers to action.

- 1) Identify types of questions used to support learner learning.
- 2) Determine when to employ each type of question.
- 3) Analyse how learners respond to different types of questions.
- 4) Write different types of questions to use with a lesson.

Issues for Consideration

- a) How does the framing of the question impact learning?
- b) How do instructors identify when to rephrase or use follow up questions?
- c) Do differences (rank, social, etc.) influence the learners' responses to questions?
- d) How long should an instructor wait for learners to respond to questions?
- e) What communications barriers may impact questioning?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Brookfield, S. D., & Preskill, S. (2016). *The discussion book: Fifty great ways to get people talking*. John Wiley & Sons

Canadian Forces Training Development Centre (2011). *Guidebook for new Canadian Forces Instructors*.

Center for Innovation in Teaching and Learning (2023, February 12). *Questioning strategies*. <https://citl.illinois.edu/citl-101/teaching-learning/resources/teaching-strategies/questioning-strategies?src=cte-migration-map&url=%2Fresources%2Ftopics%2Fmethods%2Fstrateg.html>



Ionescu, M. & Bocoş, M. (2017). *Treatise on modern didactics* (2nd ed.). Parallel 45 Publishing House.

King, A. (1995). Designing the instructional process to enhance critical thinking across the curriculum. *Teaching of Psychology*, 22(1), 13-17. https://doi.org/10.1207/s15328023top2201_5



Module 1.3.4 Counselling and Feedback Strategies

Description

Counselling is one of the most important leadership responsibilities for instructors. This module on counselling is designed to equip instructors with the skills and knowledge they need to support learners in a variety of learning and development contexts. Instructors use these skills to help learners handle difficult professional and personal situations that affect individual performance. The module will cover topics such as preparing for a counselling session, building rapport with learners, using open-ended questions to encourage dialogue producing counselling reports. In addition, instructors will learn how to avoid common counselling mistakes and how to develop effective feedback strategies. Additional information on counselling is available in the Non-Commissioned Officer Professional Military Education Reference Curriculum.

Learning Objectives/Outcomes

- 1) Explain how counselling learners differs from counselling subordinates in a unit.
- 2) Prepare a counselling session for a learner.
- 3) Produce a counselling report for a learner.
- 4) Identify effective and ineffective feedback strategies.

Issues for Consideration

- a) What situations can be handled with a verbal counselling instead of a formal written counselling?
- b) How do personal biases affect your performance as a counsellor?
- c) What circumstances may occur during a counselling session that could require some form of legal action?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Arădăvoaice, G. (1997). *Communication in the military environment*. Publishing House of the Academy of Higher Military Studies.

Emelifeonwu, D. C. (Ed.) (2013). *Non-Commissioned officer professional military education reference curriculum*. Partnership for Peace Consortium.

Greculeac, A., Salciuc L., Erhan M. (2016), *Counseling for personal development*, George Tofan Publishing House.

Headquarters, Department of the Army (2014). *ATP 6-22.1 The counseling process*. <https://www.capl.army.mil/atp-6-22x1/web.php>.



Shute, V. J. (2008). Focus on formative feedback. *Review of Educational Research*, 78(1), 153–189. <https://doi.org/10.3102/0034654307313795>.



Swiss Armed Forces Leadership Training Academy (2020). *Working Aid 70.007E, Leadership*. Swiss Armed Forces College.

THEME 2. Planning Instruction

Goal

The goal of this theme is to ensure that instructors are able to plan effective lessons in accordance with established standards and to meet learner expectations.

Description

Adopting the foundational skills and knowledge learned in Theme 1 begins with planning a lesson. At subsequent levels, these skills will be expanded to encompass planning a Programme of Classes and managing a course of instruction. At the basic level, Theme 2 contains one block with modules where learners will examine learning objectives and lesson plan structures. They will also gain the skills necessary to prepare a lesson plan from a lesson outline by planning the details of the instructional activities and customising the lesson content based on personal experiences.

Learning Objectives/Outcomes

- 1) Write learning objectives.
- 2) Explain how each lesson plan element supports the learning process.
- 3) Prepare a personalised lesson plan.

References/Readings

Canadian Forces Training Development Centre (2011). *Guidebook for new Canadian Forces Instructors*.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Block 2.1 Lesson Plan Preparation

*“The objective of education is learning,
not teaching!”*

Russel L Ackhoff

Description

This block is designed to equip instructors with the necessary skills to create effective lesson plans. The topics in this block include understanding how to use learning objectives and the components of a lesson plan. Additionally, the block teaches instructors how to customise their lesson plan by drawing on personal experiences to enhance learner engagement. Personalising a lesson plan is particularly important for military instructors because it helps learners see who the learning content is important when performing military operations. At the completion of this module instructors will have a better understanding of the process of preparing effective and engaging lesson plans.

Learning Objectives/Outcomes

- 1) Write learning objectives.
- 2) Describe the parts of the lesson plan.
- 3) Prepare a lesson plan.

Issues for Consideration

- a) Why are learning objectives important to the instructor?
- b) What section of the lesson is the most difficult to prepare?
- c) How much detail is necessary in the lesson plan to ensure you are able to deliver the lesson effectively?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Canadian Forces Training Development Centre (2011). *Guidebook for new Canadian Forces Instructors*.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

Headquarters, Department of the Army (2021). *Training and educational development in support of the institutional domain*. <https://adminpubs.tradoc.army.mil/pam-phlets/TP350-70-14.pdf>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Singapore Management University Centre for Teaching and Learning (2023, Jun 1). *Lesson planning*. <https://cte.smu.edu.sg/approach-teaching/integrated-design/lesson-planning>



Module 2.1.1 Learning Objectives

Description

Often instructors at the basic level will obtain the objectives from a lesson outline (e.g., course control document) that is given to them. The instructors will need to interpret those objectives or may need to write additional objectives. This module about creating and using learning objectives in a lesson plan is designed to help instructors understand the importance of setting clear and measurable learning goals for their learners. The module begins with an introduction to learning objectives and their purpose in the instructional process. It then delves into the types of learning objectives and how to write them effectively, including the use of Audience, Behaviour, Condition and Degree (ABCD) and Specific, Measurable, Achievable, Result-oriented and Time-bound (SMART) formats. Additionally, the module covers the importance of aligning learning objectives with instructional content and how to ensure that learning objectives are measurable and achievable. At the conclusion of this module, instructors will have a solid understanding of how to create and use learning objectives to enhance the instructional process and help learners achieve their learning goals.

Learning Objectives/Outcomes

- 1) Identify types of objectives.
- 2) Describe the differences between learning objectives and learning outcomes.
- 3) Write objectives that follow the ABCD and SMART formats.
- 4) Write learning objectives.
- 5) Explain how instructors use learning objectives to prepare the lesson.

Issues for Consideration

- a) When should you use learning outcomes instead of learning objectives?
- b) What is the most challenging aspect of writing learning objectives?
- c) How does SMART complement the ABCD format?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Teaching Commons (2023, February 26). *Course objectives & learning outcomes*. <https://resources.depaul.edu/teaching-commons/teaching-guides/course-design/Pages/course-objectives-learning-outcomes.aspx>



Hand-out Praktijkopleider 1.0, page 12, Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzoorgen van opleidingen.

Harden, R.M. (2002). Learning outcomes and instructional objectives: is there a difference?. *Medical Teacher*, (24)2, 151-155. <https://doi.org/10.1080/0142159022020687>



Krathwohl, D. R., Anderson, L. W., & Bloom, B. S. (2001). *Taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Pearson Education, Inc.

Lawlor, K. B. (2012). Smart goals: *How the application of smart goals can contribute to achievement of learner learning outcomes*. *Developments in Business Simulation and Experiential Learning*, (39), 259-267. <https://absel-ojs-ttu.tdl.org/absel/index.php/absel/article/view/90>



Mager, R. F. (1997). *Preparing instructional objectives* (3rd ed.). Center for Effective Performance.

Module 2.1.2 Lesson Plans

Description

This module is designed to help instructors understand the key elements of an effective lesson plan and how to use those elements to prepare a lesson. Most military E&IT institutions use a prescribed format for lesson plans. The format may vary from institution to institution; however, the lessons will have similar elements. Most lesson plans in the military include administrative information about the lesson length, resources that are required to implement the lesson activities, safety considerations and information used to prepare for instruction. That information may be included on the lesson outline that instructors use when they are preparing a lesson.

Each lesson should begin with an overview of what will be learned and information or activities that will motivate learners. At the basic instructor level, the next portion of the lesson will typically include explaining new knowledge or demonstrating skills that must be learned. Instructors should include ample time for learner practice. If the lesson outline includes an assessment of learning, then the instructor will need to include that in the lesson plan. Lastly, the instructor should summarise what was learned and encourage learners to identify ways they will use what they learned. Instructors must ensure that they carefully plan the amount of time that will be used for each part of the lesson. This will ensure that the lesson and overall course is on schedule. At the conclusion of this module, instructors will have a solid understanding of how to structure an effective lesson plan that will engage learners and support the learning objectives.

Learning Objectives/Outcomes

- 1) Identify the components to include in a lesson plan.
- 2) Explain the purpose of each component of the lesson plan.
- 3) Analyse whether lesson plan format used in your E&IT institution contains all the elements necessary for an effective lesson.

Issues for Consideration

- a) How do enabling learning objectives help you prepare the lesson?
- b) How will you know the learning goal has been achieved?
- c) Why is it important to ensure that learners have time to practice the new knowledge and skills?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

Hand-out Praktijkopleider 1.0, page 18, Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzoorgen van opleidingen.

HANDBOEK VERZORGER VAN O&iT 1.1, December 2020, page 43, LAND WARFARE CENTRE / Expertisecentrum Opleidingskunde Defensie

Headquarters, Department of the Army (2021). *Training and educational development in support of the institutional domain*. <https://adminpubs.tradoc.army.mil/pamphlets/TP350-70-14.pdf>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Module 2.1.3 Lesson Plan Preparation

Description

This module is designed to help instructors prepare effective lesson plans that engage learners and align with the learning objectives. In some military institutions, instructors will be given a lesson plan and must personalise the lesson. Some organisations will require instructors at the basic level to use a lesson outline (e.g., course control document (CCD-3) to write the lesson plan. This module will prepare instructors for either situation.

The module begins with an introduction to lesson planning and its importance in effective teaching. Instructors will learn how to prepare a lesson plan including identifying and writing the objectives, determining the needs of learners, planning resources requirements and materials, learner engagement, presenting information, allowing time for learner practice and summarising the lesson.

The module also covers how to personalise the lesson plan based on the instructor's experience with the content. Instructors will learn how to incorporate personal experiences and examples to make the lesson more engaging and relevant to learners. These personalised examples are particularly important in military E&IT institutions because learners want to know how the knowledge and skills have been used during military operations. Personalisation may also include adjustments to the lesson timing, activities, examples and technology used for learning. Finally, the module includes a practical exercise where instructors can prepare their own lesson plan and personalise it based on their experiences. By the end of this module, instructors will have a solid understanding of how to prepare effective lesson plans that align with their instructional goals and are personalised based on their own experiences with the content.

Learning Objectives/Outcomes

- 1) Explain the purpose of the personalised lesson plan.
- 2) Explain why it's important to put timings in a lesson plan.
- 3) Prepare a lesson plan.

Issues for Consideration

- a) What is the most difficult part of preparing the lesson plan?
- b) How much detail should you include in the lesson plan?
- c) What circumstances may require you to write a script for portions of the lesson?
- d) How does the instructor's experience teaching the content influence the lesson plan?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. John Wiley & Sons.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

Hand-out Praktijkopleider 1.0, page 18, Expertisecentrum Opleidingskunde Defensie / Expertise cel: Verzoeken van opleidingen.

HANDBOEK VERZORGER VAN O&iT 1.1, December 2020, page 43, LAND WARFARE CENTRE / Expertisecentrum Opleidingskunde Defensie

Headquarters, Department of the Army (2021). *Training and educational development in support of the institutional domain*. <https://adminpubs.tradoc.army.mil/pam-phlets/TP350-70-14.pdf>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.



NCO School Instructor Development Reference Curriculum Project Team Meeting, Prague, Czechia, September 2022



NCO School Instructor Development Reference Curriculum Project Team Meeting, Tartu, Estonia, May 2022

THEME 3. Teaching AND facilitating LEARNING

Goal

The goal of this theme is for instructors to learn how to deliver lessons, facilitate learning activities, assess learning and ensure that learners meet the objectives outlined in the instruction.

Description

Themes 1 and 2 provided the knowledge and skills necessary to prepare for instruction. Theme 3 focuses on the delivery of instruction, beginning with preparing the learning environment and techniques to manage delivery. Instructors will also learn about instructional methods used by basic-level instructors and consider how the learning environments and instructional media affect delivery. There is more to delivering instruction than ensuring that learners satisfy the learning objectives. Formative and summative assessments are necessary to ensure instructors provide additional support to help learners meet or exceed the learning requirements. These assessments also enable instructors to adapt their techniques in order to enhance overall learning experiences. The three blocks in this theme, Classroom Management, Instructional Approaches, and Assessment and Evaluation cover the basic skills and knowledge necessary for instructors at the basic level to deliver and assess learning.

Learning Objectives/Outcomes

- 1) Prepare and manage learning environments.
- 2) Apply instructional methods to achieve learning outcomes.
- 3) Use formative and summative assessments to measure learner learning.
- 4) Use evaluation data to improve lesson delivery.

References/Readings

Merrill, M. D. (2002). First principles of instruction. *Educational Technology Research & Development*, 50, 43-59.
<https://doi.org/10.1007/BF02505024>



Headquarters, Department of the Army (2021). *Training and educational development in support of the institutional domain*.
<https://adminpubs.tradoc.army.mil/pam-phlets/TP350-70-14.pdf>



Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. ASCD.

Waugh, C. Keith, Gronlund, Norman E. (2013). *Assessment of Learner Achievement* (10th ed.). Pearson.

Block 3.1 Classroom Management

Description

A well-prepared learning environment provides the foundation for successful delivery. Instructors must ensure that their preparation and management of the classroom are sufficient to enable the lesson delivery to go smoothly. In the first module in this block, instructors will learn how to prepare the learning environment effectively to include the physical configuration of the learning space, preparing learning materials and ensuring that they are prepared to use the learning technology necessary for the lesson. In the second module, instructors will learn how to manage the classroom while instructing to include handling disruptive behaviours and using strategies to keep learners productively engaged in learning.

Learning Objectives/Outcomes

- 1) Prepare the learning environment.
- 2) Manage classroom disruptions.
- 3) Apply strategies to increase learner engagement.

Issues for Consideration

What is required to be done in order to prepare the classroom?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Canadian Forces Training Development Centre (2011). *Guidebook for new Canadian Forces Instructors*.
Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. ASCD.

Module 3.1.1 Classroom Preparation

Description

This module is designed to help new instructors prepare a safe, engaging and effective learning environment for learners. Because instructors oversee military E&IT, the term classroom includes any environment where instructor-led learning occurs.

Instructors will learn how to select classroom arrangements that are appropriate for the learning activities in a lesson. They will consider how the physical layout and use of other learning resources promote engagement and interaction. Preparation steps include ensuring that the classroom is stocked with the necessary materials for the lesson. Instructors will learn how to create a safe learning environment by minimising hazards and ensuring that emergency procedures are in place and communicated to learners. Finally, the module will cover technology integration. Instructors will learn how to incorporate technology into their classroom in a way that enhances instruction and learning. Instructors will also learn to prepare contingencies for continuing the lesson when technology or equipment failures occur.

By the end of this module, new instructors will have a solid understanding of how to prepare the classroom and create a safe, engaging and effective learning environment for learners.

Learning Objectives/Outcomes

- 1) Select an appropriate classroom configuration for a lesson.
- 2) Describe the steps necessary to prepare the classroom.
- 3) Explain the benefit of the orientation board.
- 4) Analyse the safety risks that should be considered when preparing the classroom.
- 5) Describe how to prepare for using instructional technology.

Issues for Consideration

- What size classroom is optimal for the learning activities?
- What resources are available in the classroom that may enhance the lesson?
- How will you handle a technology failure?
- How is preparing a lesson for virtual delivery different than preparing a lesson for in-person delivery?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

Canadian Forces Training Development Centre (2011). *Guidebook for new Canadian Forces Instructors*.

Headquarters, Department of the Army (2021). *Training and educational development in support of the institutional domain*. <https://adminpubs.tradoc.army.mil/pamphlets/TP350-70-14.pdf>



Vosko, R. S. (1991). Where we learn shapes our learning. *New Directions for Adult and Continuing Education*, 50, 23-32.

Yale Poorvu Center for Teaching and Learning. (2023, April 2). *Classroom seating arrangements*. <https://poorvucenter.yale.edu/ClassroomSeatingArrangements>



Module 3.1.2 Classroom Management

Description

This module discusses the skills needed to create a positive and productive learning environment. It covers several key areas to include establishing expectations and routines, addressing behaviour problems and fostering learner engagement.

The first area that will be covered is establishing expectations and routines. Instructors will learn how to set clear and consistent expectations for behaviour and academic performance and establish routines and procedures that support learning, to include creating a positive classroom culture, establishing clear guidelines for behaviour and promoting a sense of community and respect.

The general discipline associated with military service alleviates many behaviour issues in classrooms; nevertheless, instructors may occasionally need to address behaviour problems. Instructors will learn how to identify and address behaviour problems in a firm, fair and consistent way. This includes utilising positive reinforcement and consequences, and implementing strategies for addressing specific behaviour problems, such as tardiness or disruptive behaviour.

A third aspect of classroom management is learner engagement. Whilst using different instructional methods is one way to foster learner engagement, instructors can also employ the following approaches: questioning techniques, physical presence and creating a psychologically safe environment. Additionally, instructors will learn what behaviours are likely to impact engagement. Lastly, this module examines the impact of time management in learner engagement and classroom management.

At the end of this module, new instructors will have a solid understanding of how to effectively manage the classroom to create a positive and productive learning environment. They will be equipped with a range of strategies and techniques for promoting engagement, addressing behaviour problems and building positive relationships with learners.

Learning Objectives/Outcomes

- 1) Explain how to establish routines and guidelines for classroom behaviour.
- 2) Describe techniques for handling disruptive learners.
- 3) Use techniques to keep learners engaged in learning.
- 4) Analyse how time management affects behaviour and engagement.

Issues for Consideration

- a) How may physical presence be used to manage learner behaviour and engagement?
- b) What types of questions are likely to promote more learners to engage in learning?
- c) How do you handle learners that are overconfident or challenge the instructor?
- d) What types of disruptive behaviours are common in E&IT classrooms?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal course and individual studies.

References/Readings

- Brookfield, S. D. (2015). *The skillful teacher: On technique, trust, and responsiveness in the classroom*. John Wiley & Sons.
- Canadian Forces Training Development Centre (2011). *Guidebook for new Canadian Forces Instructors*.
- Lemov, D. (2015). *Teach like a champion 2.0: 62 Techniques that put learners on the path to college*. Jossey-Bass.
- Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works: Research-based strategies for every teacher*. ASCD.

Block 3.2 Instructional Approaches

“More important than the curriculum is the question of the methods of teaching and the spirit in which the teaching is given”

Bertrand Russell

Description

Instructional approaches consist of principles and techniques related to instructional methods, environments and media. Instructors combine these three elements into an instructional strategy that describes how training will occur. Instructional methods are the tactics and activities that instructors select to enable learning. Instructors should select methods that align with the content and allow learners to accomplish the learning objectives. Instructors at the basic level will primarily use demonstration and practice methods to deliver knowledge-based and skill-based lessons.

The instructional environment describes the physical, social and psychological conditions for delivering the lesson. Instructors must consider these elements when selecting the instructional method and the instructional media. For example, conducting a lesson face-to-face must be done differently than when that lesson is delivered via distributed learning. Instructors must also ensure that the media that is used for delivering the lesson is suitable for the learning method and environment. In this block, instructors will learn how to ensure their instructional method, environment and media selections work together as an effective instructional strategy

Learning Objectives/Outcomes

- 1) Describe various instructional methods.
- 2) Describe instructional environments.
- 3) Identify different types of instructional media.
- 4) Combine an instructional method, environment and media into an effective instructional strategy.

Issues for Consideration

- a) Consider how large the group of learners is.
- b) How are learners going to be involved in interactive lecture?
- c) Be aware that not every learner learns the same way.

Learning Methodology/Assessment

Learning methods may include lectures, guest speakers, video case studies, role playing, blogging, case studies, practical exercises, readings, research, article reviews, small-group exercises, self-reflection and reflective journaling.

References/Readings

Department of the Air Force. (2003). Air Force Manual (AFMAN) 36-2236. *Guidebook for Air Force Instructors*. <https://www.angtec.af.mil/Portals/10/Courses%20resources/afman36-2236.pdf?ver=2018-10-02-084122-173>



Honary, E., (2019, January 15). *Instructional Methods*. Skills Converged. <https://www.skillsconverged.com/TraintheTrainer/LearnToTeach/Instructional-Methods.aspx>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Roseneshine, B. (2012). Principles of instruction. Research-based strategies that all teachers should know. *American Educator*, 36(1), 12-19.

Module 3.2.1 Instructional Methods

Description

Two types of lessons are commonly used by instructors at the basic level. A knowledge-based lesson is intended to have learners learn new facts, concepts, processes and principles. A skill-based lesson aims to have learners perform new tasks. Instructors at the basic level will deliver both types of lessons using direct instruction methods. Instructors explicitly explain new knowledge using interactive lectures and other techniques. For a skill-based lesson, instructors demonstrate the skills and then prompt learners to practice. In this module, instructors will learn about how to use interactive lectures, demonstration methods and practice methods.

Learning Objectives/Outcomes

- 1) Describe how demonstration is used as a method of instruction.
- 2) Identify techniques that may be used to demonstrate knowledge or skills.
- 3) Describe how practice is used as a method of instruction.
- 4) Identify techniques that may be used to have learners practice knowledge or skills.
- 5) Analyse how various technologies may be used for demonstration and practice methods.

Issues for Consideration

- a) What information is necessary to demonstrate various forms of knowledge?
- b) What risks are associated with the instructor performing a skill demonstration?
- c) What teaching aids are useful for an interactive lecture?
- d) How may you encourage learner engagement in an interactive lecture?
- e) What situations may prevent the instructor from using demonstration and practice methods?

Learning Methodology/Assessment

Learning methods may include lectures, video case studies, role playing, blogging, case studies, practical exercises, readings, research, article reviews, small-group exercises, self-reflection and reflective journaling.

References/Readings

Department of the Air Force. (2003). Air Force Manual (AFMAN) 36-2236. *Guidebook for Air Force Instructors*. <https://www.angtec.af.mil/Portals/10/Courses%20resources/afman36-2236.pdf?ver=2018-10-02-084122-173>



Merrill, M. D. (2002). First principles of instruction. *Educational Technology Research & Development*, 50, 43-59. <https://doi.org/10.1007/BF02505024>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Roseneshine, B. (2012). Principles of instruction. Research-based strategies that all teachers should know. *American Educator*, 36(1), 12-19.

Stockard, J., Wood, T. W., Coughlin, C., & Khoury, C. R. (2018). The effectiveness of direct instruction curricula: A meta-analysis of a half century of research. *Review of Educational Research*, 88(4), 479-507.

Module 3.2.2 Instructional Environments

Description

A learning environment can be defined as the physical, social and cultural context in which learning occurs. It includes the tools, resources and interactions that support or hinder learning. Learning environments can be formal, such as classrooms or lecture halls or informal, such as online communities or personal study spaces. A good learning environment is safe, engaging and supportive, providing opportunities for learners to acquire and apply new knowledge and skills.

Practitioners have identified three types of learning environments: namely, (1) resident delivery, (2) distributed delivery that includes online learning and Mobile Education and Training Teams (METT), and (3) blended learning environments that combine residential and distributed learning. The instructor has a responsibility to ensure that the instructional method and/or media will result in effective learning in each of these environments. In some cases, the instructor may need to adapt the method and/or the media to create the physical, social and cultural conditions to support learning.

Learning Objectives/Outcomes

- 1) Describe ways to create a learning environment that fosters respect and rapport.
- 2) Define a culture of learning.
- 3) Identify techniques to promote a culture of learning.
- 4) Analyse the advantages and disadvantages of resident, distributed and blended learning environments.
- 5) Explain ways to make resident, distributed and blended learning environments effective for learning.

Issues for Consideration

- a) How does the type of learning content influence how the instructor uses the learning environment?
- b) How do the internal conditions of the learner (e.g., emotion, mindset) influence whether the learning environment is effective?
- c) What adaptations are necessary when an instructor is forced to move a lesson from a resident environment to an online environment?

- d) What can instructor do to overcome barriers to learning in each learning environment?

Learning Methodology/Assessment

Guided discussion, individual studies, case studies, interactive lecture and demonstration.

References/Readings

Brookfield, S. D. (2015). *The skillful teacher: On technique, trust, and responsiveness in the classroom*. John Wiley & Sons.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

Hiemstra, R. (1991). Aspects of effective learning environments. *New directions for adult and continuing education*, 1(50), 5-12. <https://roghiemstra.com/leindex.html>



Department of the Air Force. (2003). Air Force Manual (AFMAN) 36-2236. *Guidebook for Air Force Instructors*. <https://www.angtec.af.mil/Portals/10/Courses%20resources/afman36-2236.pdf?ver=2018-10-02-084122-173>



Vosko, R. (1991). Where we learn shapes our learning. Aspects of effective learning environments. *New directions for adult and continuing education*, 1(50), 23-32.

Module 3.2.3 Instructional Media

Description

Curriculum or course designers often make media choices; however, instructors at the basic level may need to decide what media to use from the available options. The instructors must also ensure they understand how to use various visual aids and media to support learning.

Visual representation of the learning content enhances learner interest, comprehension and retention of information. Visuals serve two critical functions for learning – communication and psychological processing of the content. Visuals used for communication may be decorative, organisational, representative, relational or depictive. The psychological processes for learning are also supported when instructors use visuals. Visuals support motivation, attention, activation of prior knowledge, helping learners build mental models and retention.

Visual aids come in various forms, including slides, flip charts, diagrams, photos, animations, videos and equipment. Learning materials may also include visual aids such as flashcards, mnemonics and other visuals included in books or study materials. In this module, instructors will learn how various visual aids support learning, how to use visual aids during demonstration and practice, and how to select visual aids that support the learning objectives and content.

Learning Objectives/Outcomes

- 1) Explain how visual aids support the learning process.
- 2) Identify the considerations for selecting visual aids.
- 3) Describe how to use visual aids during each part of a knowledge lesson.
- 4) Describe how to use visual aids during each part of a skills lesson.
- 5) Employ visual aids (technology and training aids) when teaching a lesson.

Issues for Consideration

- a) What are the risks associated with various types of visual aids?
- b) How can instructors develop new visual aids?
- c) When does the learning environment affect what visual aids may be used by the instructor?

Learning Methodology/Assessment

Teaching delivery methods may include interactive Lecture, Role-Play, Simulation and Self-paced

References/Readings

Clark, R. C. & Lyons C. (2004). *Graphics for learning: Proven guidelines for planning, designing, and evaluating visuals in training materials*. Pfeiffer.

Duarte, N. (2008). *Slideology: The art and science of creating great presentations*. O'Reilly Media.

Malamed, C. (2015). *Visual design solutions: Principles and creative inspiration for learning professionals*. Wiley.

Mayer, R. E. (2020). *Multimedia learning* (3rd ed.). Cambridge University Press.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Sahati, Q. & Staml, J. A. (2022). The use of visuals in undergraduate neuroscience education: recommendations for educators. *Teaching of Psychology*, 49(3), 276-283. <https://doi.org/10.1177/00986283211000326>



Swiss Armed Forces *Training methodology* (51.018; 01.07.2015). Swiss Armed Forces.

Block 3.3 Assessment and Evaluation

Description

The terms assessment and evaluation are often used interchangeably in the field of education; however, the terms are intended to have a distinct meaning in this curriculum. Assessment is the measurement of learning. Evaluation is the measurement of learning programme effectiveness or the effectiveness of components of a learning programme.

At the basic level, instructors must learn how to administer various types of assessments. Analysing the assessment data will help the instructor understand how learners are progressing toward achieving the learning objectives. Assessment data may also be used to evaluate the effectiveness of lesson delivery; however, self-reflection and direct observation are the primary techniques used to evaluate instructor performance.

This block contains two modules that will provide instructors at the basic level with guidance on effective ways to assess learner learning and methods that can be used to improve instructor performance. Instructors can use the skills and knowledge from these modules to improve overall learner and instructor effectiveness.

Learning Objectives/Outcomes

- 1) Describe types of learner assessments.
- 2) Describe methods for evaluating the effectiveness of lesson delivery.
- 3) Explain how assessment and evaluation are used to improve learner learning.

Issues for Consideration

- a) Why do we assess learners?
- b) How do instructors improve their performance?
- c) Why do instructors need to be evaluated?

Learning Methodology

Learning methods may include lectures, guest speakers, video case studies, role playing, blogging, case studies, practical exercises, readings, research, article reviews, small-group exercises, self-reflection and reflective journaling.

References/Readings

- Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.
- Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. Alexandria, VA: ATD Press.
- Ludvik, M. B. (2019). *Outcomes-Based Program Review: Closing Achievement Gaps In- and Outside the Classroom With Alignment to Predictive Analytics and Performance Metrics* (2nd edition). Stylus Publishing. Sterling, Virginia.
- Shrock, S. A. & Coscarelli, W. C. (2007). *Criterion-referenced test development: Technical and legal guidelines for corporate training* (3rd ed.). Pfeiffer.
- Waugh, C. Keith, Gronlund, Norman E. (2013). *Assessment of Learner Achievement* (10th ed.). Pearson.

Module 3.3.1 Types of Assessments

Description

Assessment is an essential component of teaching and learning, as it helps instructors to evaluate learning, identify areas of strength and weakness and modify their teaching strategies accordingly. In this module, new instructors will understand the importance of assessment, the different types of assessments and how to use assessments to inform teaching and learning.

Three categories of assessments are included in this module. First, diagnostic assessments are used before the beginning of training to determine how much prior knowledge learners already possess about the topic. Second, formative assessments are used throughout a lesson to measure how well learners understand the topic. Third, summative assessments are used at the end of a lesson or course to determine if learners have attained the learning objectives. In this module, instructors will learn about the different assessment types available to assess learning and when to use each type of assessment.

Learning Objectives/Outcomes

- 1) Explain the purpose of assessments.
- 2) Identify when to administer formative and summative assessments.
- 3) Describe the formative assessment techniques.
- 4) Describe the summative assessment methods.
- 5) Determine when to use written and performance assessments.
- 6) Use assessment methods that are appropriate for the learning situation.

Issues for Consideration

- a) How is learning and performance measured?
- b) What are the differences between formative and summative assessments?
- c) How can informal classroom assessments and questions be used to assess learning?
- d) Why should the assessments be aligned with the learning objectives?

Learning Methodology/Assessment

Teaching delivery methods may include lectures, guided discussions, self-study, group exercises and practical exercises.

References/Readings

Barkley, E. F., & Major, C. H. (2016). *Learning assessment techniques: A handbook for college faculty*. John Wiley & Sons, Incorporated.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

Heritage, M., Harrison, C., & Wiliam, D. (2020). *The Power of assessment for learning: Twenty years of research and practice in US and US classrooms* (1st ed.). Corwin.

Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. Alexandria, VA: ATD Press.

Shrock, S. A. & Coscarelli, W. C. (2007). *Criterion-referenced test development: Technical and legal guidelines for corporate training* (3rd ed.). Pfeiffer

Waugh, C. Keith, Gronlund, Norman E. (2013). *Assessment of Learner Achievement* (10th ed.). Pearson.

Module 3.3.2 Evaluate Lesson Delivery

Description

Self-assessment is a valuable tool for instructors to evaluate their teaching and identify areas for improvement. In this module, instructors will learn how to use self-assessment to evaluate their delivery of lessons. The module will begin by introducing instructors to the concept of self-assessment and the benefits of using it to evaluate their lesson delivery. Instructors will also explore the importance of reflecting on their teaching practices and identifying areas for improvement.

Instructors will learn about different types of self-assessment tools and techniques., how to develop effective self-assessment questions and prompts, and strategies for analysing and reflecting on self-assessment results. The module will also address how to use self-assessment to improve teaching practices. Instructors will learn how to develop action plans based on self-assessment results, implement changes to their teaching practices, and evaluate the effectiveness of changes made based on self-assessment results. At the end of the module, instructors will have a deeper understanding of how to use self-assessment to evaluate their delivery of lessons and improve their teaching practices.

Learning Objectives/Outcomes

- 1) Explain the purpose of self-assessment as an instructor.
- 2) Determine what tools to use for evaluating lesson delivery.
- 3) Analyse what areas of lesson delivery may be improved.
- 4) Develop a plan to improve lesson delivery.

Issues for Consideration

- a) What aspects of self-assessment are the most difficult?
- b) How may you overcome blind spots in your self-assessment?
- c) What strategies may you use to help implement improvements in your teaching?
- d) What measures will you use to determine if you are improving?

Learning Methodology/Assessment

Teaching delivery methods may include lectures, guided discussions, self-study, group exercises and practical exercises.

References/Readings

Department of the Air Force. (2003). *Air Force Manual (AFMAN) 36-2236. Guidebook for Air Force Instructors*. <https://www.angtec.af.mil/Portals/10/Courses%20resources/afman36-2236.pdf?ver=2018-10-02-084122-173>



Headquarters, Department of the Army (2018). *TRADOC Regulation 600-21 Faculty development and recognition program*.

Klein, J.D., Spector, J. M., Grabowski, L., & de le Taja, I. (2004). *Instructor competencies: Standards for face-to-face, online, and blended settings*. Information Age Publishing

Little, O., Goe, L., Bell, C. (2009). *A Practical Guide to Evaluating Teacher Effectiveness*. National Comprehensive Center for Teach Effectiveness. <https://files.eric.ed.gov/fulltext/ED543776.pdf>



Oliver, R. M., Wehby, J. H., & Nelson, J. R. (2015). Helping teachers maintain classroom management practices using a self-monitoring checklist. *Teaching and Teacher Education*, 51, 113-120. <https://doi.org/10.1016/j.tate.2015.06.007>





NCO School Instructor Development Reference Curriculum Project Team Meeting, Tartu, Estonia, May 2022



NCO School Instructor Development Reference Curriculum Project Team Meeting, Prague, Czechia, September 2022



NCO School Instructor Development Reference Curriculum Project Team Meeting, NATO School Oberammergau, Germany, October 2021



NCO School Instructor Development Reference Curriculum Project Team Meeting, Budapest, Hungary, February 2022



ADVANCED INSTRUCTOR LEVEL (AIL)

Experience gained as an instructor at the basic level serves as the foundation to becoming an advanced level instructor. Instructors at the advanced level employ interactive instructional methods, facilitate learner-led learning, use advanced assessment techniques and evaluate the performance of basic level instructors. The increased complexity of responsibilities also requires advanced level instructors to use advanced communication and coaching skills to support the cognitive growth of learners and other instructors. In addition to these changes, advanced level instructors also have a greater role in the development of learning activities. Instructors at the advanced level must create programmes of classes and adapt the instructional materials to match the learners and delivery environment. They may lead mobile training teams where the teaching methods and media must be quickly adapted to the delivery environment.

THEME 1. Foundations/Frameworks

Goals

The goals of this theme are to understand the adult learning theories, taxonomies and instructional models used to plan and facilitate advanced instructional methods. Learners will also learn about the communications skills necessary for writing evaluations and counselling learners.

Description

At the advanced level, the Foundations/Frameworks Theme is intended to provide knowledge of theories and models associated with adult learning. Instructors will employ experiential learning techniques that empower learners to guide many learning activities. In this regard, the instructors will transition from directly leading instruction to facilitating learning. An integral part of that transition includes gaining a deeper understanding of the taxonomies and instructional models used to design lessons that are more complex than the lessons delivered by instructors at the basic level. Instructors at the advanced level play a more significant role in evaluating and counselling learners. In addition, they will evaluate and counsel instructors at the basic level. This theme consists of two blocks and their ensuing modules build on the foundations established at the basic instructor level.

Learning Objectives/Outcomes

- 1) Describe adult learning theories.
- 2) Analyse the taxonomies and instructional models used to facilitate adult learning.
- 3) Apply communication skills to counsel learners and instructors.

Block 1.1 Adult Educational Theories and Frameworks

“High achievement always takes place in the framework of high expectation.”

Charles Kettering

Description

At the basic level, instructors learned the fundamental learning theories and aspects of the cognitive learning process that can affect the learning and motivation. The advanced level instructor must understand the learning needs of adults, as well as develop ways to tailor education and training to the characteristics of adult learners. The instructor must ensure that the learning supports the desired outcomes indicated by the taxonomies used during analysis performed in SAT.

Learning Objectives/Outcomes

- 1) Employ adult learning theories.
- 2) Apply taxonomies of learning.
- 3) Apply instructional models.
- 4) Participate in the SAT process.

Issues for Consideration

- a) Discuss the best and worst experience in a learning situation. What did they like about it? What did they dislike about it? How do these observations influence the experience that you want to provide for learners?
- b) What are the impacts of focusing on only one domain of learning? What are some of the repercussions that might be evident in learners' behaviour?

Learning Methodology/Assessment

Interactive lecture, individual studies, guided discussion. Assessment of this knowledge will be assessed in the delivery of instructions.

References/Readings

- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. Jossey-Bass.
- Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2nd ed.). Cambridge Books.
- Merriam, S. B. & Bierema, L. L. (2014). *Adult learning: Linking theory and practice: Insights from community, workplace, and higher education*. Jossey-Bass.

Module 1.1.1 Adult Learning Theories

Description

Instructors learned fundamental learning theories at the basic level. Those theories are not focused on learners of any particular age; however, there are learning theories that consider how the characteristics of adults influence learning. Advanced level instructors should understand how those characteristics led to the development of adult learning principles. Application of the adult learning principles, requires use of advanced instructional methods including strategies that allow learners to direct the learning experience. In this module instructors will examine common adult learning theories and consider how those theories influence the design and delivery of learning activities and materials.

Learning Objectives/Outcomes

- 1) Describe adult learning theories including andragogy, experiential learning, self-learning and transformative learning.
- 2) Explain how adult learning principles influence the design and delivery of instruction.
- 3) Compare adult learning theories with learning theories learned at the basic level.

Issues for Consideration

- a) What learner characteristics are necessary for self-learning?
- b) In what circumstances may some of the adult learning principles not apply to teaching adults?
- c) How have information technology and the Internet changed how adults learn?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Knowles, M. S. Holton, E. F. III & Swanson, R. A. (2011). *The adult learner* (7th ed.). Gulf.
- Merriam, S. B. & Bierema, L. L. (2014). *Adult learning: Linking theory and practice: Insights from community, workplace, and higher education*. Jossey-Bass.
- Mezirow, J., Taylor, E. W. & Associates (2009). *Transformation learning in practice*. Jossey-Bass.

Module 1.1.2 Taxonomies of Learning

Description

Human performance is complex, often requiring inter-related knowledge, skills and attitudes. As such, instructors must have an understanding of different types of knowledge learners must acquire and articulate clear goals for achieving them. Taxonomies of learning are tools that instructors can use to distinguish knowledge, skills and attitudes from one another and then craft appropriate learning objectives. In this module, instructors will learn about the cognitive, affective and psychomotor domains of learning. They will also learn how to use taxonomies for each domain.

Learning Objectives/Outcomes

- 1) Define the cognitive, affective and psychomotor learning domains.
- 2) Describe at least one taxonomy for each domain.
- 3) Explain how instructors use taxonomies when they create instruction.
- 4) Write learning objectives for each domain.

Issues for Consideration

- a) What learning domain is the most difficult to use?
- b) Bloom's taxonomy is the most widely known. Are there alternatives to this taxonomy that you may use?
- c) Why are behavioural learning objectives written for the cognitive and affective domains?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Anderson, L. W. & Krathwohl, D. R. (2001). *A taxonomy of learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.
- Fink, D. L. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. Jossey-Bass.
- O'Neil, G. & Murphy, F. (2010). *Assessment: Guide to taxonomies of learning*. University College Dublin. <https://www.ucd.ie/t4cms/ucdtla0034.pdf>

Module 1.1.3 Instructional Models

Description

Learning theories articulate perspectives about how learning happens; however, those theories do not prescribe instructional activities or sequences that enact the theory. In contrast, instructional models provide specific arrangements of actions and tactics that enact a learning theory. This additional detail is used to create detailed lesson plans. In this module, instructors will learn about two of the most widely used instructional models, Gagne's Nine Events of Instruction and Kolb's Experiential Learning Model. They will understand when to use each model and how the experiences of instructors and learners influence the choice of models. Instructors will also examine instructional models employed in their institutions.

Learning Objectives/Outcomes

- 1) Describe Gagne's Nine Events of Instruction.
- 2) Explain Kolb's Experiential Learning Model.
- 3) Identify instructional models used in your learning environment.
- 4) Analyse the similarities and differences between instructional models.

Issues for Consideration

- a) What situations are better suited to using a particular instructional model?
- b) Does the learning theory that you use influence the instructional model?
- c) How does Kolb's Experiential Learning Theory give people the opportunity to examine their feelings and behaviours related to interactions with other individuals?
- d) Are learning styles a useful consideration in instructional models?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.
- Joyce, B, Weil, M. & Calhoun, E. (2009). *Models of teaching* (8th ed.). Pearson Education.
- Kolb A. (201). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education.

Module 1.1.4 Systems Approach to Training

Description

Defining and delivering effective, efficient and affordable E&IT solutions to satisfy performance gaps is achieved through the SAT. At the basic level, instructors acquired rudimentary knowledge of SAT. At the advanced level, instructors are expected to have a deeper understanding of the SAT process and its application in education and training.

The SAT is typically employed when an E&T requirement is identified through a training needs analysis and where no suitable solutions are in place to address the requirement. The identification of this unmet training need triggers the application of the rest of the SAT. Each SAT phase is supported with a series of activities that are necessary to develop and implement new education or training. The SAT process is standardised in NATO and is explained in detail in NATO Bi-SC Directive 075-007.

The role of the advanced level instructor in the SAT depends on how their country and military implements the SAT. In some countries the advanced level instructors may be a participant in every step of the process. They may participate as a content Subject Matter Expert (SME) or they may be fully responsible for completing SAT activities. For those reasons, advanced level instructors must not only understand the individual phases of the SAT process, but must also be able to execute the entire process.

Learning Objectives/Outcomes

- 1) Relate how analysis phase products are used to develop E&IT solutions.
- 2) Describe how quality control processes are used within the SAT.
- 3) Assist in the design of E&IT solutions.
- 4) Develop instructional products according to the SAT.
- 5) Explain evaluation processes and products used by instructors.

Issues for Consideration

- a) Where are training needs, education requirements or performance deficiencies identified?
- b) What is the advanced instructor's role in the identification of strategies to attain the products necessary to close an identified gap in the training and education system?
- c) How important are taxonomies and learning domains during the design phase?
- d) How do you measure if the learning product is closing the performance gaps or fulfilling the training requirements?
- e) How may course content be developed with limited resources?
- f) How important are pilot courses when implementing a new design? How fast should instructors make changes after pilot courses?
- g) How often should you monitor current or past learners who graduated from the course?

Learning Methodology/Assessment

Teaching delivery methods may include interactive lectures, structured experience, guided discussions, self-study, syndicate and practical exercises.

References/Readings

Berchev, D.I & Stefanov, M. (2019). The systems approach to training in the military educational system – Aggregation of integration processes. *Knowledge International Journal*, 30, 1457-1462. <https://doi.org/10.35120/kij30061457B>



Rothwell, W., Bencotter, B., King, K. & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Reiser, R. A. & Dempsey, J. V. (Ed.) (2020). *Trends and Issues in Instructional Design and Technology* (4th ed.). Pearson.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Block 1.2 Communication

Description

At the basic level, instructors considered the role and importance of the communication process and techniques to delivering effective instruction. Similarly, advanced level instructors need to hone their communication skills, particularly writing, in order to interact and engage effectively with learners, subordinates, peers and leaders in the training system. Instructors will need to document learner performance and handle administrative requirements through written communication. Drawing on their experience, advanced level instructors will continue to enhance their writing skills through studying and practising how to convey their ideas clearly and meaningfully. In addition, instructors at this level will learn how to improve their counselling, coaching and mentoring skills that will be used to evaluate and guide instructors at the basic level.

Learning Objectives/Outcomes

- 1) Write learner evaluations and other administrative documents.
- 2) Analyse strategies to enhance counselling, coaching and mentoring effectiveness.

Issues for consideration

- a) How may technology be used to improve writing effectiveness?
- b) How do you create a climate of openness to feedback with learners and peers?
- c) How do you encourage others to improve self-perception?

Learning Methodology/Assessment

Teaching delivery methods may include interactive lectures, structured experience, guided discussions, self-study, syndicate and practical exercises.

References/Readings

R. H. West & L. H. Turner (2019). *Interpersonal communication* (4th ed.). Sage Publications.

Swiss Armed Forces Leadership Training Academy (2020). *Working Aid 70.007E, Leadership*. Swiss Armed Forces College.

Module 1.2.1 Written Communication

Description

Instructors at the advanced level have responsibility to write documents including learner evaluations, administrative documents, lesson plans and instructional materials. To be successful, they will need to express their ideas and thoughts clearly in writing. In this module, instructors will examine techniques that enable them to communicate effectively in writing and practice writing various types of documents that are typically used in E&IT contexts.

Learning Objectives

- 1) Identify the components of effective written communications.
- 2) Write learner evaluations.
- 3) Create an argumentation paper.
- 4) Write a persuasive memo.

Issues for Consideration

- a) How does writing an email differ from writing a report?
- b) Why do instructors need to write well?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Frederick, P. (2011). *Persuasive writing: How to harness the power of words*. Prentice Hall

McIntosh, W. A. (2003). *Guide to effective military writing*. Stackpole Books.

Nierenberg, G. I. (1996). *Meta-Talk - How to uncover the hidden meanings in what people say*. Barnes & Noble Books.

U.S. Army War College (2023, May 21). *Effective Writing Website*. <https://ssl.army-warcollege.edu/dde/ews/index.cfm>



Module 1.2.2 Counselling, Coaching and Mentoring

Description

At the basic level instructors were exposed to the role of counselling in the learning process. At the advanced level, instructors possess more experience and maturity that enables them to observe, evaluate and develop subordinates and support peer instructors. In addition to counselling skills, instructors at the advanced level should know how to use coaching and mentoring skills to guide the development of instructors. Coaching and mentoring skills may also be used to help learners achieve performance and career goals. In this module, instructors will examine how they may use counselling, coaching and mentoring to support learners and instructors.

Learning Objectives/Outcomes

- 1) Analyse how counselling supports development of instructors at the basic level.
- 2) Distinguish between event, performance and professional growth counselling.
- 3) Compare counselling, coaching and mentoring
- 4) Determine when coaching and mentoring should be used with learners and instructors.
- 5) Demonstrate counselling, coaching and mentoring.

Issues for Consideration

- a) What aspects differ between counselling instructors and learners?
- b) What are the major considerations between the three different types of counselling?
- c) How may personal bias and self-interest impair the counselling process?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Chartier, M. R. (1974). Five components contributing to effective interpersonal communications. In J. W. Pfeiffer & J. E. Jones (eds.) *The 1974 annual handbook for group facilitators* (pp.125-128). University Associates Publishers.

Lagacé-Roy, D., and Knackstedt, J. (2007). *The mentoring handbook*. Canadian Forces Leadership Institute.

Luthi, J.R. (1978) Communicating communication. In J. W. Pfeiffer & J. E. Jones (eds.) *The 1978 annual handbook for group facilitators* (pp.125-128). University Associates Publishers.

Minter, R. L. & Thomas, E. G. (2000). Employee development through coaching, mentoring, and counseling: A multidimensional approach. *Review of Business*, 21(1/2), 43-47).

Peavy, R. V. (1984). *Counselling adults for decision-making: A pragmatic orientation.*” Canada Employment and Immigration Commission.

Sachdeva, S. & Malhotra, K. (2014). Motivating learners – essentials of mentoring, coaching & counseling: Operational strategy. *Issues and Ideas in Education*, 2(2), 273–300. <https://doi.org/10.15415/ije.2014.22020>



Thomas, J. T. & Thomas, T. T. (2015). Mentoring, coaching, and counseling: Toward a common understanding. *Military Review*, 95(4), 50-57.

West, R. H. & Turner, L. H. (2019). *Interpersonal communication* (4th ed.). Sage Publications.



NCO School Instructor Development Reference Curriculum Project Team Meeting, Budapest, Hungary, February 2022



NCO School Instructor Development Reference Curriculum Project Team Meeting, Prague, Czechia, September 2022

THEME 2. Planning Instruction

Goal

The goal of this theme is for instructors to learn how to create a programme of instruction.

Description

Instructors learned how to plan and personalise a lesson at the basic level. At the advanced level, instructors design complex lessons that comprise a programme of instruction that is also called a Programme of Classes. As such, Theme 2 covers instructional design skills, audience and content analyses, advanced instructional methods and activities, media selection and assessment strategies. These advanced skills enable instructors to create lessons using adult learning techniques that change the role of the instructor from directly delivering instruction to facilitating learning activities that the learners lead.

Learning Objectives/Outcomes

- 1) Explain how instructional analyses are used to create a sequence of lessons and learning activities.
- 2) Design a series of lessons that comprise a programme of instruction.

Block 2.1 Create a Programme of Classes

Description

The Programme of Classes is the final NATO course control document developed to define an E&IT solution. Nations that use an instructional design system different from NATO will have a similar document that serves as a blueprint for the education or training that will be developed. Instructors at the advanced level will be required to generate the Programme of Classes. This includes creating enabling learning objectives (ELOs), designing the overall instructional strategy and content structure, selecting the instructional methods and allocating the time necessary for each lesson. The Programme of Classes also includes descriptions of how learner learning will be assessed. In this block, instructors will learn about the elements included in the Programme of Classes and practice creating one.

Learning Objectives/Outcomes

- 1) Describe the purpose of each section in the Programme of Classes.
- 2) Define learner characteristics.
- 3) Conduct analysis necessary to determine the learning content.
- 4) Prepare an assessment plan.
- 5) Design instructional strategies.
- 6) Write a Programme of Classes.

Issues for Consideration

- a) How do learner characteristics affect instructional strategy?
- b) How important is instructional analysis for developing enabling learning objectives?
- c) What constraints should be considered when developing the Programme of Classes?

Learning Methodology/Assessment

Teaching delivery methods may include interactive Lecture, Role-Play, Simulation and Self-paced learning

References/Readings

- Rothwell, W., Benscoter, B., King, K., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.1.1 Audience and Content Analysis

Description

A critical step in creating the Programme of Classes is to understand the characteristics of the learners. These characteristics play an important part in determining what content should be taught and what instructional methods should be used. Instructors at the advanced level will participate in audience analysis during the analysis and design phase of SAT. Instructors must understand how different variables such as experience, motivation, class size and location of the audience will affect the instruction. Instructors must also analyse the content or they risk choosing instructional strategies that are not effective for the learning objectives that learners must achieve. Together, the audience and content analysis provide the information that is necessary to begin creating the Programme of Classes.

Learning Objectives/Outcomes

- 1) Analyse the target audience.
- 2) Relate results of target audience analysis to the content of the instructions.
- 3) Explain the types of content that instructors will need to include in a Programme of Classes.
- 4) Analyse learning content.

Issues for Consideration

- a) How does an audience with different experience levels affect resources (time, material and instructor) necessary for the Programme of Classes?
- b) How does motivation affect the instructional methods that are used?
- c) What are the ways that different types of content are used in the learning process?

References/Readings

- Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.
- Merrill, M.D. (2020). *First principles of instruction*. AECT.
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- Rothwell, W., Benscoter, B., King, K., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

Module 2.1.2 Instructional Strategies

Description

An instructional strategy is a combination of decisions about how to configure instructional methods, learning environments, and media into an instructional strategy for a course or Programme of Classes. Designing an instructional strategy is a trade-off between opportunities and constraints that occur based on the learners, the instructional environment, the instructional media and the resources available to develop and implement the Programme of Classes. In this module, instructors will learn about the factors that determine how to configure the instructional methods, media and environment into an effective strategy.

Learning Objectives/Outcomes

- 1) Explain the considerations that influence the selection of instructional methods.
- 2) Describe overarching instructional strategies such as receptive, directive, guided discovery and exploratory.
- 3) Analyse learning environment characteristics that affect the instructional strategy.
- 4) Configure the learning methods, environment and media for a Programme of Classes.

Issues for Consideration

- a) What is the purpose of having an overarching instructional strategy?
- b) What trade-offs are common when configuring the instructional strategy?
- c) What resource constraints commonly influence the instructional strategy?
- d) How do instructors include safety considerations when designing the instructional strategy?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Bannan, B., Dabbagh, N. & Walcutt, J. J. (2020). Instructional strategies for the future. *Journal of Military Learning, April 2020*, 68-80.
- Clark, R. C. & Mayer, R. E. (2016). *e-Learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. Pfeiffer.
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- Stolovitch, H. D. & Keeps, E. J. (2011). *Telling ain't training, 2nd edition: Updated, expanded, enhanced*. Association for Talent Development.

Module 2.1.3 Advanced Instructional Methods

Description

Instructors at the basic level primarily use demonstration and practice as the instructional methods. At the advanced level, instructors will face more complex settings where different methods of delivery are appropriate for the learners and content. These advanced methods include case study, peer learning, role-play, problem-based learning, simulations and other methods. Instructors will also learn about collaborative learning techniques that support many of the advanced instructional methods. The combination of the advanced methods and techniques enables instructors to facilitate learning that is consistent with adult learning principles and promotes deeper learning.

Learning Objectives/Outcomes

- 1) Describe each advanced instructional method and when it should be used.
- 2) Explain how to use each advanced instructional method.
- 3) Define collaborative learning techniques.
- 4) Analyse how collaborative learning techniques may be used with advanced instructional methods.
- 5) Select appropriate advanced instructional methods for lessons or a Programme of Classes.

Issues for Consideration

- a) How does the learning environment influence your selection of instructional methods?
- b) What advanced instructional methods may be used when the learners do not have a lot of prior knowledge about the learning topic?
- c) What are some of the advantages and disadvantages of using collaborative learning techniques?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 4 Design of Instructional Programmes*, A-P9-050-000/PT-004.

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 5 Development of Instructional Programmes*, A-P9-050-000/PT-005.

Clarke, S., Skinner, J., Drummond, I. & Wood, M. (2023) Twelve tips for using tactical decision games to teach non-technical skills. *Medical Teacher*, 45(1), 25-3. <https://doi.org/10.1080/0142159X.2021.2010693>



Cranton, P. (2000). *Planning instruction for adult learners* (2nd ed.) Wall & Emerson.

Cross, K. P. & Barkley, E. F. (2014). *Collaborative learning techniques: A handbook for college faculty* (2nd ed.). Jossey-Bass.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Renner, P. (2005). *The art of teaching adults*. Training Associates.

University of Maryland Teaching and Learning Center (2023, May 21). *Collaborative learning*. <https://tltc.umd.edu/instructors/resources/collaborative-learning>



Module 2.1.4 Media Selection

Description

In an instructional situation, there is a message to be communicated. Media are the delivery vehicles used to provide the sensory stimulus to heighten the potential for learning. Video, web pages, diagrams and graphics, electronic slides and printed material are examples of media used to directly communicate or otherwise support the message to be delivered. Additionally, instructors must ensure that the media used provides effective ways for learners to practice what they are learning and receive feedback on practice. Lastly, the cost of creating and maintaining the media should be considered when selecting what media will be used for each learning activity. Proper media selection ensures that information is presented to learners by the most effective and cost-efficient means possible.

Learning Objectives/Outcomes

- 1) Describe the advantages and disadvantages of various media used in training and education.
- 2) Explain how the cost of media development factors into media selection.
- 3) Select appropriate media for instruction.

Issues for Consideration

- a) How do media limitations influence method of instruction?
- b) Is the media selected more or less important than the method of instruction used?
- c) What technologies may be used to develop media for education and training?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Clark, R.E. (2016). Reconsidering research on learning from media. *Review of Educational Research*, (53)4, 445-459. <https://doi.org/10.3102/00346543053004445>



NATO Training Group (2023). *The NATO Advanced Distributed Learning Handbook: Guidelines for the development, implementation and evaluation of Technology Enhanced Learning*. <https://adlnet.gov/assets/uploads/ADL%20Handbook%20-%20JAN%202023%20total.pdf>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Swiss Armed Forces *Training methodology* (51.018; 01.07.2015). Swiss Armed Forces.

Module 2.1.5 Assessment Strategy

Description

Assessment is a crucial part of teaching. It is the primary way to determine if learning has occurred and learners have met the performance objectives. Assessment also provides insight regarding learner progress. As part of developing a Programme of Classes, instructors at the advanced level need to develop an assessment plan. That strategy needs to define how diagnostic, formative and summative assessments will be used to measure learning. The plan should serve as a blueprint for developing assessment items and tests that are necessary to determine whether learners have met the performance objectives in a Programme of Classes.

Learning Objectives/Outcomes

- 1) Determine how to measure learning and performance in the cognitive, psychomotor and affective domains.
- 2) Describe how to determine how many test items are necessary.
- 3) Explain ways to determine whether test items are reliable and valid.
- 4) Develop test items for performance-based tests.
- 5) Develop test items for knowledge-based tests.
- 6) Conduct test item analysis.

Issues for Consideration

- a) What is the connection between assessment and learning objectives?
- b) How may resource limitations influence the assessment strategy?
- c) Who prepares an assessment plan?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 7 Evaluation of Learners, A-P9-050-000/PT-007*.

Forsell, J., Forslund Frykedal, K., & Hammar Chiriac, E. (2020). Group Work Assessment: Assessing Social Skills at Group Level. *Small Group Research*, 51(1), 87–124. <https://doi.org/10.1177/1046496419878269>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Schrock, S. A. & Coscarelli, W. C. (2007). *Criterion-referenced test development: Technical and legal guidelines for corporate training* (3rd ed.). Pfeiffer.

Wyse, A. E. (2020) Comparing cut scores from the Angoff method and two variations of the Hofstede and Beuk methods. *Applied Measurement in Education*, 33(2), 159-173 <https://doi.org/10.1080/08957347.2020.1732385>





NCO School Instructor Development Reference Curriculum Project Team Meeting, NATO HQ Brussels, Belgium, February 2023



Meeting of the NCO School Instructor Development Reference Curriculum Project Lead with the Hungarian Defence Minister, Budapest, February 2022

THEME 3. Teaching AND Facilitating Learning

Goal

The goal of this theme is show instructors how to facilitate learning using advanced instructional and assessment methods.

Description

The lessons delivered by basic level instructors primarily use demonstration and practice as the instructional activities. With these methods, the instructor serves as the expert and focal point of instruction. Often, this is referred to as the instructor being the sage on the stage. In contrast, advanced level instructors will guide learning activities that empower learners to engage in their learning. An instructor at this level must transition from the sage on the stage to the guide on the side. In this role, the instructor allows learners to control most of the learning environment and learning activities. They employ collaborative learning techniques and group projects. Instructors at this level also play a role in evaluating the programme's effectiveness and assessing the performance of basic level instructors. Accordingly, Theme 3 is composed of three blocks. The first block, Classroom Management, is focused on managing groups in the learning environment. That is followed by the Advanced Instructional Approaches block, where learners will learn about collaborative learning methods, advanced instructional media and study techniques that support independent learning. The third block is Assessment and Evaluation. Instructors will learn about advanced assessment techniques, how to evaluate the effectiveness of lessons and learning programmes, and assessing the performance of basic level instructors.

Learning Objectives/Outcomes

- 1) Manage group dynamics and conflicts in the context of facilitating learning.
- 2) Apply facilitation methods to guide learner learning.
- 3) Evaluate the effectiveness of instruction and basic instructor performance.

Block 3.1 Classroom Management

*“Teamwork begins by building trust.
And the only way to do that is to overcome
our need for invulnerability.”*

Patrick Lencioni

Description

Instructors at the advanced level transitioning from directly leading instruction to facilitating learning will also need new skills to manage the learning environment. Facilitating learning includes managing the learning environment so that the participants interact with each other and learn from each other. A key change is that instructors will use small groups and peer-to-peer learning methods that rely on learners to guide the learning process. Therefore, instructors need to learn how to support group formation and the social processes that are necessary for learners to work productively. This block consists of two modules: the first, Group Development, considers the stages of group formation and how group formation occurs within the learning environment. The second module, Conflict Management, includes topics related to managing interpersonal conflicts that may occur during collaborative learning.

Learning Objectives/Outcomes

- 1) Lead learner groups to form cohesive teams.
- 2) Manage interpersonal conflicts that occur during training and education.

Issues for Consideration

- a) What are the primary barriers to group development in a learning environment and how may instructors alleviate the barriers?
- b) What types of interactions (e.g., learner to learner, learner to instructor) are likely to create conflict?
- c) How does the power differential between instructors and learners influence conflict management?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Borg, M., Kembro, J., Notander, J., Petersson, C., & Ohlsson, L. (2011). Conflict management in learner groups - a teacher's perspective in higher education.

Högre utbildning, 1(2), 111–124. <https://hogreutbildning.se/index.php/hu/article/view/860>



Bens, I. (2018). *Facilitating with ease! Core skills for facilitators, team leaders and members, managers, consultants and trainers* (4th ed). Hoboken, NJ: John Wiley and Sons.

Deutsch, M., Coleman, P. T., & Marcus, E. C. (Eds.) (2006). *The handbook of conflict resolution: Theory and practice* (2nd ed.). Jossey-Bass.

Knowles, M. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2nd ed). Cambridge Books.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Swiss Armed Forces Leadership Training Academy (2020). *Working Aid 70.007E, Leadership*. Swiss Armed Forces College

Tuckman, B. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63(6), 384-399.

Wilkinson, M. (2004). *The secrets of facilitation*. Jossey-Bass Publishers.

Module 3.1.1 Group Development

Description

Collaborative learning offers tremendous benefits for learners and instructors. As such, instructors at the advanced level must understand how sociocultural learning and group development theories are used to make collaborative learning successful. Vygotsky's sociocultural theory and zone of proximal development serve as the foundation for understanding how learning occurs through interaction with others. Tuckman's group development theory explains the stages that teams go through including examining how interpersonal relationships and behaviours relate to accomplishing tasks. Instructors that understand this information will be able to support how learners can learn to work together in the learning environment and ensure that collaborative learning is effective.

Learning Objectives/Outcomes

- 1) Analyse how the sociocultural theory and zone of proximal development explain the advantages of group learning.
- 2) Describe how group development in a learning environment differs from team formation in a military unit.
- 3) Explain the instructor's role in supporting the stages of group development.
- 4) Assess how social loafing influence collaborative learning.

Issues for Consideration

- a) Why is the zone of proximal development different for each learner and how does this influence learning in a group?
- b) What are the impacts of the learning environment on group dynamics?
- c) When should the instructor change leadership style to influence the group development processes?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Bens, I. (2018). *Facilitating with ease! Core skills for facilitators, team leaders and members, managers, consultants and trainers* (4th ed). Hoboken, NJ: John Wiley and Sons.

Johnson, D. W., & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365-379. <https://doi.org/10.3102/0013189X09339057>



Olmstead, J. A. (1980). Small-Group instruction: Theory and practice. Human Resources Organisation. <https://files.eric.ed.gov/fulltext/ED094137.pdf>



Piezon, S. L. & Donaldson, R. L. (2005). Online groups and social loafing: Understanding learner-group interactions. *Online Journal of Distance Learning Administration*, 8(4). <https://ojdla.com/archive/winter84/piezon84.pdf>



Tuckman, B. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63(6), 384-399.

Wilkinson, M. (2004). *The secrets of facilitation*. Jossey-Bass Publishers.

Yale Poorvu Center for Teaching and Learning (2023, May 18). *Group Work*. <https://poorvucenter.yale.edu/GroupWork>



Module 3.1.2 Conflict Management

Description

Conflict can occur in any organisation and the learning environment is no exception. Disagreement is a natural process and is often caused by differences in values, attitudes, socialisation and behaviours. Managing conflict is a crucial skill for instructors facilitating collaborative learning groups. In this module, instructors will learn effective strategies for identifying, addressing and resolving conflicts that may arise within collaborative learning environments. They will gain practical techniques to promote a positive and productive group dynamic, fostering a cooperative and supportive learning environment for all learners.

Learning Objectives/Outcomes

- 1) Identify the sources of conflict in collaborative learning groups.
- 2) Explain how open and honest communication relates to conflict management.
- 3) Identify approaches to conflict resolution.
- 4) Employ strategies to manage conflicts in the learning environment.

Issues for Consideration

- a) What are the most common sources of conflict in collaborative learning?
- b) How does setting clear expectations reduce the likelihood of conflict?
- c) Is conflict more likely to occur in certain stages of group development?
- d) What role does empathy play in conflict management?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Borg, M., Kembro, J., Notander, J., Petersson, C., & Ohlsson, L. (2011). Conflict management in learner groups - a teacher's perspective in higher education.

Högre utbildning, 1(2), 111–124. <https://hogreutbildning.se/index.php/hu/article/view/860>

Deutsch, M., Coleman, P. T., & Marcus, E. C. (Eds.) (2006). *The handbook of conflict resolution: Theory and practice* (2nd ed.). Jossey-Bass.

Swiss Armed Forces Leadership Training Academy (2020). Working Aid 70.007E, Leadership. Swiss Armed Forces College



Block 3.2 Advanced Instructional Approaches

“Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organisational objectives. It is the fuel that allows common people to attain uncommon results.”

Andrew Carnegie

Description

At the basic level, instructors learned the basic instructional techniques and how to properly employ them in the instructional environment. Instructors at the advanced level must be able to use additional, complex instructional methods that were introduced in Theme 2. The 2020-22 COVID-19 pandemic has demonstrated the need for instructors to be able to adapt the methods and media to be delivered via distributed and hybrid modalities. Therefore, instructors must be able to match the instructional method with the delivery media and environment in ways that provide effective learning experiences. This includes providing strategies and coaching that enables learners to study effectively and learn from each other. Additionally, instructors at the advanced level may be required to lead Mobil Education Training Teams (METT). All of the approaches learned in this module will enable instructors at the advanced level to successfully support learning in a variety of complex instructional settings.

Learning Objectives/Outcomes

- 1) Employ advanced instructional methods.
- 2) Adapt instructional methods and media to the learning environment.
- 3) Advise learners on how to use study techniques.
- 4) Lead a METT.

Issues for Consideration

- a) What type of course or content are better suited to use advanced instructional methods?
- b) Does the size of the group impact the selection of advanced instructional techniques or only the outcomes that learners must achieve?
- c) If a course uses appropriate instructional methods, how does the instructional media used impact the quality of learning?

- d) What considerations are important when planning delivery of a course via a METT?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Brookfield, S. D. (2015). *The skillful teacher: On technique, trust, and responsiveness in the classroom*. John Wiley & Sons.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

Huggett, C. (2022). *The facilitator's guide to immersive, blended, and hybrid learning*. Association for Talent Development.

Module 3.2.1 Employ Advanced Instructional Methods

Description

Themes 1 and 2 provided instructors the foundational knowledge and instructional skills to prepare instruction that uses advanced instructional methods. All of these theories and techniques are designed to promote collaborative learning and higher levels of learning. Employing adult learning models and methods is difficult and requires a significant change in how instructors lead learning. Therefore, in this module instructors will practice using instructional models and advanced instructional methods. Feedback from that practice will ensure that instructors make the transition from “sage on the stage” to the “guide on the side”.

Learning Objectives/Outcomes

- 1) Demonstrate each advanced instructional method.
- 2) Facilitate a class using Gagne’s Nine Events of Instruction and an advanced instructional method.
- 3) Facilitate a class using Kolb’s Experiential Learning Model and an advanced instructional method.
- 4) Apply group development and conflict management strategies in the context of facilitating advanced instructional methods.

Issues for Consideration

- a) How does using advanced instructional methods differ from using demonstration and practice methods?
- b) What are the most difficult aspects of facilitating vice instructing?
- c) What difficulties may instructors encounter when they allow learners to guide most of the learning?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Clarke, S., Skinner, J., Drummond, I. & Wood, M. (2023) Twelve tips for using tactical decision games to teach non-technical skills. *Medical Teacher*, 45(1), 25-3. <https://doi.org/10.1080/0142159X.2021.2010693>



Cranton, P. (2000). *Planning instruction for adult learners* (2nd ed.) Wall & Emerson.

Cross, K. P. & Barkley, E. F. (2014). *Collaborative learning techniques: A handbook for college faculty* (2nd ed.). Jossey-Bass.

Gagne, R. M., Wager, W. W., Golas, K. C., & Keller, J. M. (2004). *Principles of instructional design* (5th ed.). Wadsworth Publishing.

Joyce, B, Weil, M. & Calhoun, E. (2009). *Models of teaching* (8th ed.). Pearson Education.

Kolb A. (201). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Pearson Education.

Renner, P. (2005). *The art of teaching adults*. Training Associates.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/ Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

University of Maryland Teaching and Learning Center (2023, May 21). *Collaborative learning*. <https://tltc.umd.edu/instructors/resources/collaborative-learning>



Module 3.2.2 Instructional Media and Delivery Modes

Description

Instructors at the advanced level must be able to support learning in online and blended learning environments using a variety of educational technologies and media. Instructors must be able to facilitate learning using virtual classroom technologies and prepare instructional materials for use in virtual classrooms and learning management systems. The foundations of learning do not change in technology-mediated learning environments; however, how instructors execute instructional methods, assess learning and provide feedback to learners is different. Therefore, instructors at the advanced level must be able to support learning in an online, resident or blended delivery modes.

Learning Objectives/Outcomes

- 1) Distinguish between the characteristics of online, blended and resident delivery environments.
- 2) Explain the differences between synchronous and asynchronous delivery.
- 3) Analyse what types of media are best suited to online learning environments.
- 4) Determine what instructional methods may be used in online and blended learning environments.
- 5) Adapt teaching and facilitation techniques for the delivery environment.

Issues for Consideration

- a) What are the challenges and opportunities of each teaching environment?
- b) What additional planning considerations are necessary when teaching online?
- c) What are the best activities to ensure the effective interactions in each delivery mode?
- d) What should an instructor do if learners are not capable of using technology required for a class?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Clark, R.E. (2016). Reconsidering research on learning from media. *Review of Educational Research*, (53)4, 445-459. <https://doi.org/10.3102/00346543053004445>



NATO Training Group (2023). *The NATO Advanced Distributed Learning Handbook: Guidelines for the development, implementation and evaluation of Technology Enhanced Learning*. <https://adlnet.gov/assets/uploads/ADL%20Handbook%20-%20JAN%202023%20total.pdf>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

North Atlantic Treaty Organization (2021). *Defence Education Enhancement Programme (DEEP) Strategy for Distance Learning Support*. https://www.nato.int/cps/en/natohq/topics_190120.htm



University of Buffalo Curriculum Assessment and Teaching Transformation. (2023, May 16). *Delivery Modes and Teaching Approaches*. <https://www.buffalo.edu/catt/develop/design/delivery-modes.html>



Module 3.2.3 Study Techniques

Description

Developing effective study techniques is essential for learners to optimise their learning and academic performance. In this module, instructors will explore various study techniques and strategies that can enhance learner understanding, retention and application of information. By learning these techniques and teaching them to learners, instructors at the advanced level will essentially be teaching learners how to learn. These methods enable instructors to convey and ensure the learning occurs outside of the classroom.

Learning Objectives/Outcomes

- 1) Describe study techniques and strategies.
- 2) Determine the study technique that should be used with each type of learning content.
- 3) Describe time management techniques for studying.

Issues for Consideration

- a) How do study techniques influence the effectiveness of learning?
- b) Can multiple study techniques be used in combination?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Bjork, R. A., Dunlosky, J., & Kornell, N. (2013). Self-Regulated Learning: Beliefs, Techniques, and Illusions. *Annual Review of Psychology*, 64, 417-444. <https://doi.org/10.1146/annurev-psych-113011-143823>



Brown, P. C., Roediger III, H. L., & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. Harvard University Press.

Hattie, J., Hodis, F.A., & Kang, S. H. (2020). Theories of motivation: Integration and ways forward. *Contemporary Educational Psychology*, 61. <https://doi.org/10.1016/j.cedpsych.2020.101865>



Roediger III, H. L., & Butler, A. C. (2011). The critical role of retrieval practice in long-term retention. *Trends in Cognitive Sciences*, 15(1), 20-27. <https://doi.org/10.1016/j.tics.2010.09.003>



Tamm, S. (2023, January 10). *The 7 best study methods for all types of learners*. E-learner.org

University of Augustine for Health Sciences (2020, January 29). *10 effective study techniques to try this year*. <https://www.usa.edu/blog/study-techniques/>



Winerman, L. (2011). *Study smart: Make the most of your study time with these drawn-from-the-research tips*. American Psychological Association. <https://www.apa.org/gradpsych/2011/11/study-smart>



Wong, S. S. H., & Lim, S. W. H. (2023). Take notes, not photos: Mind-wandering mediates the impact of note-taking strategies on video-recorded lecture learning performance. *Journal of Experimental Psychology: Applied*, 29(1), 124-135. <https://doi.org/10.1037/xap0000375>



Module 3.2.4 Mobile Education Training Teams

Description

Mobile Education Training Teams (METT) are comprised of instructors who are temporarily sent to conduct classes in locations other than their primary workplace. Leading a mobile education and training team requires a unique set of skills to effectively manage a team that operates in diverse locations and settings. Instructors must also be able to adapt all facets of the Programme of Classes to the delivery environment. In this module, participants will learn the fundamentals of leading a mobile education and training team, including team coordination, communication strategies and adaptive leadership approaches. They will develop the necessary skills to successfully navigate the challenges and opportunities that come with leading education and training that is delivered via METT.

Learning Objectives/Outcomes

- 1) Identify the challenges associated with delivering training via a METT.
- 2) Explain how prepare for, execute and recover from delivering a METT course.
- 3) Describe how to lead a mobile team in diverse and dynamic settings.
- 4) Adapt instructional methods and media to the delivery environment.
- 5) Identify the resources necessary to conduct instruction via a METT.

Issues for Consideration

- a) How do you establish the requirements the requesting institution representatives need to provide for the METT?
- b) What types of local customs will affect the METT and how should the instructors adapt to those customs?
- c) What factors associated with the METT may influence the effectiveness of learning?
- d) How should a METT plan for potential issues with educational technologies?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Reading

Morey, J. C., Bush, M. D., Beebe, R. McPhail, S. & Bickley, W. R. (2009). *Best practices for using mobile training teams to deliver non commissioned officer education*. United States Army Research Institute For the Behavioural and Social Sciences. <https://apps.dtic.mil/sti/pdfs/ADA500349.pdf>



NATO School Oberamergau (2023, May 18). *Distributed learning - METT explained*. <https://www.natoschool.nato.int/Academics/METT>



Block 3.3 Assessment and Evaluation

Description

Assessments are used to diagnose the progress of the learner toward achieving the course objectives and outcomes. Instructors learned about diagnostic, formative and summary assessments at the basic level; however, the complexity of content taught by instructors at the advanced level requires instructors to use an additional assessment method. In the first module in this block instructors will learn how to use rubrics to assess learning and performance. Instructors at the advanced level play a greater role evaluating the efficiency, effectiveness and affordability of an E&IT solution. In the second module, instructors will learn how to evaluate a course or programme of instruction. This block concludes with a module about instructor evaluations because instructors at the advance level will conduct evaluations of instructors at the basic level.

Learning Objectives/Outcomes

- 1) Use rubrics to assess learning and performance.
- 2) Use the course evaluation process to recommend improvements.
- 3) Evaluate instructor performance.

Issues for Consideration

- a) What are some advantages and disadvantages of using rubrics?
- b) Are learner perceptions of course quality always useful for improving a course?
- c) What tools are the most useful for evaluating instructor performance?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Reading

- Kirkpatrick, W. K., Kirkpatrick, J. D. (2016). *Kirkpatrick's Four Levels of Training Evaluation*. ATD Press.
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- Waugh, C. Keith, Gronlund, Norman E. (2013). *Assessment of Learner Achievement* (10th ed.). Pearson.

Module 3.3.1 Rubrics

Description

Rubrics are valuable tools that provide clear criteria and expectations for assessing learning and performance outcomes. In this module, participants will learn how to create and effectively use rubrics to assess learner work across various domains and disciplines. They will explore the purpose and benefits of rubrics, learn the process of developing rubrics and discover best practices for utilising rubrics to provide meaningful feedback and promote learner growth.

Learning Objectives/Outcomes

- 1) Define the types of rubrics.
- 2) Explain the advantages and disadvantages of using a rubric.
- 3) Identify the types of learning objectives that may be measured using a rubric.
- 4) Develop a rubric.
- 5) Use a rubric to assess learning.

Issues for Consideration

- a) Why is it necessary to explain the rubric to learners?
- b) How can instructors ensure the consistency of grading when multiple instructors are using a rubric?
- c) What are some of the most difficult aspects of developing the rating criteria in a rubric and how may instructors overcome those challenges?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Arter, J., & McTighe, J. (2001). *Scoring rubrics in the classroom: Using performance criteria for assessing and improving learner performance*. Corwin Press.
- Brookhart, S. M. (2013). *How to create and use rubrics for formative assessment and grading*. ASCD.
- Chowdbury, F. (2019). Application of rubrics in the classroom: A vital tool for improvement in assessment, feedback and learning. *International Education Studies*; 12(1), 61-68.
- Jonsson, A., & Svingby, G. (2007). The use of scoring rubrics: Reliability, validity and educational consequences. *Educational Research Review*, 2(2), 130-144. <https://doi.org/10.1016/j.edurev.2007.05.002>
- University of Hawaii at Manoa Assessment and Curriculum Support Center (2023, May 23). *Creating and Using Rubrics*. <https://manoa.hawaii.edu/assessment/resources/creating-and-using-rubrics/#j4>
- Wolf, K., & Stevens, E. (2007). The role of rubrics in advancing and assessing learner learning. *Journal of Effective Teaching*, 7(1), 3-14.



Module 3.3.2 Course Evaluations

Description

Effective course evaluation is essential for assessing the impact of instructional programmes and identifying areas for improvement. At the basic level, instructors were introduced to evaluation and the Kirkpatrick Model, a widely recognised framework for evaluating E&IT programmes. Instructors at the advanced level play a greater role in evaluating the quality of a Programme of Classes and improving the effectiveness and efficiency of learning programmes. In this module, instructors will learn how to conduct an internal evaluation of a course using (1) Learner test results, (2) Instructor observations, (3) Learner feedback and (4) After action reviews. Using those data sources, instructors will be able to determine what changes are necessary to improve a course.

Learning Objectives/Outcomes

- 1) Analyse learner test results.
- 2) Analyse instructor observations about a course.
- 3) Analyse learner feedback about the course.
- 4) Analyse observations from after action reviews.
- 5) Identify actionable insights from evaluation data.
- 6) Develop recommendations for course improvements.

Issues for Consideration

- a) What are some other sources of information that can supplement the results of course internal evaluation?
- b) Why are multiple data sources necessary for course evaluation?
- c) What are some of the risks associated with each of the evaluation instruments used for course evaluation?
- d) Should instructors be concerned if the learners did not like the instruction? Why or why not?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Alliger, G. M., Tannenbaum, S. I., Bennett, W., Jr., Traver, H., & Shotland, A. (1997). A meta-analysis of the relations among training criteria. *Personnel Psychology*, 50(2), 341–358. <https://doi.org/10.1111/j.1744-6570.1997.tb00911.x>



Chief of the Defence Staff. (1998). CFITES Manual of Individual Training and Education, Volume 8, Validation of Instructional Programmes, A-P9-050-000/PT-008.

Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. Alexandria, VA: ATD Press.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Phillips, J. J., & Phillips, P. P. (2016). *Handbook of training evaluation and measurement methods* (4th ed.). Routledge.

Sitzmann, T., Wendy J. Casper, Brown, K., & Ely, K. (2008). A Review and Meta-Analysis of the Nomological Network of Trainee Reactions. *Journal of Applied Psychology*, 93(2), 280-295. <https://doi.org/10.1037/0021-9010.93.2.280>



Thalheimer, W. (2018). *The learning-transfer evaluation model: Sending messages to enable learning effectiveness*. Work-Learning Research. <https://www.worklearning.com/wp-content/uploads/2018/02/Thalheimer-The-Learning-Transfer-Evaluation-Model-Report-for-LTEM-v12.pdf>



Module 3.3.3 Instructor Evaluations

Description

Evaluating the performance of instructors is a vital responsibility of the instructor at the advanced level. These evaluations play a crucial role in maintaining teaching quality and fostering professional growth. In this module, instructors will delve into the intricacies of evaluating instructors primarily through the process of observation. By focusing on this evaluation mechanism, participants will develop the skills and knowledge necessary to conduct comprehensive and insightful assessments of instructors' teaching abilities. Instructors will explore the benefits and challenges associated with using observation as the primary evaluation method.

They will learn how to use evaluation criteria and standards established by the institution, prepare for an observation, document observations and provide feedback to the observed instructor. Finally, the module closes with an examination of how to use observation results to help another instructor create a development plan.

Learning Objectives/Outcomes

- 1) Describe each element of the instructor observation form.
- 2) Prepare to conduct an observation.
- 3) Perform observation of an instructor's lesson delivery.
- 4) Write the performance observation report including recommendations.
- 5) Provide constructive feedback about an instructor's performance.
- 6) Create professional development strategies for self and other instructors.

Issues for Consideration

- a) What additional data or evaluation methods may be used to evaluate instructor performance?
- b) Does every element of the observation form apply in every teaching situation?
- c) How frequently should you conduct instructor observations?
- d) What are some of the resources that may be used to support professional development of instructors?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 6 Design of Instructional Programmes, A-P9-050-000/PT-006*.

Department of the Army (2018). *TRADOC Regulation 600-21, Faculty Development And Recognition Program*.

Hanson, P. C. (1973). The Johari window: A model for soliciting and giving feedback. In J. W. Pfeiffer & J. E. Jones (eds.) *The 1973 annual handbook for group facilitators* (pp.125-128). University Associates Publishers.

Karp, H. (1987). The lost art of feedback. In W. Pfeiffer (ed.) *The 1987 Annual: Developing Human Resources* (pp. 237-244), University Associates.

Klein, J. D., Spector, J. M., Grabowski, B., & de la Teja, I. (2004). *Instructor competencies: Standards for face-to-face, online and blended settings*. Information Age Publishing.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

Stanford University Evaluation and Research (2023, May 16.) *Course feedback as a measure of teaching effectiveness*. <https://evals.stanford.edu/evaluating-teaching/course-feedback-measure-teaching-effectiveness>



Stronge, J. H. (2018). *Evaluating teaching: A guide to current thinking and best practice* (4th ed.). Corwin Press.

U.S. Army (2017). *TRADOC Form 600-21-1, Instructor Observation Rubric*. https://www.ncolcoe.army.mil/Portals/71/administration/sfdd/ref/TAB-G-TF-600-21-1_Instructor_Observation_Rubri_Change_1.pdf





NCO School Instructor Development Reference Curriculum Project Team Meeting, Budapest, Hungary, February 2022



NCO School Instructor Development Reference Curriculum Project Team Meeting, NATO School Oberammergau, Germany, October 2021



NCO School Instructor Development Reference Curriculum Project Team Meeting online with Ukrainian Team Member, Tartu, Estonia, May 2022



NCO School Instructor Development Reference Curriculum Project Team Meeting, Budapest, Hungary, February 2022



MASTER INSTRUCTOR LEVEL (MIL)

Master Instructors are subject matter experts with extensive knowledge and practical experience in the areas of adult learning, curriculum, lesson planning, instructional methods, assessments (diagnostic, formative, summative) and facilitating learning. Master instructors will continue to gain expertise in educational theories and technologies; however, instructors at this level will spend less time teaching and more time managing how the training system fulfills the E&IT requirements of the military. They focus their efforts on the following things among others: (1) building and sustaining education and training solutions utilising NATO's SAT; (2) serving as course managers and (3) leading instructor development programmes. Master instructors will use strategic and critical thinking, negotiation, leadership and management skills to serve in leadership roles within the training system.

THEME 1. Foundations

Goal

This theme aims to increase the knowledge and skills about learning theory, communication and the SAT in ways that enable the master instructor to manage the training system.

Description

At the master level, instructors play a significant role in managing the training system. Master instructors must influence senior leaders' decisions about the training system and the learning programmes. For that reason, master instructors must learn how to use communication to influence and negotiate. Leading an E&IT institution includes ensuring that training guidance from the apex level of the institution is incorporated into curricula and courses. Master instructors must understand how global programming is used to identify training requirements and be able to manage the SAT processes used to develop the curricula and courses necessary to fulfil the training needs.

Many master instructors will also serve in two roles that they did not perform as advanced level instructors. The first is managing the day-to-day execution of training. As course directors, master instructors will be responsible for handling the administrative, support, and delivery tasks necessary to implement a course. The second is managing the instructor development programmes. In that role master instructors will influence the processes to select, develop, assess, and manage instructors.

Learning Objectives/Outcomes

- 1) Use influence and negotiation techniques to influence training system decisions.
- 2) Manage execution of the SAT.
- 3) Manage instructor development.

Block 1.1 Education Theories and Frameworks

Description

Research in many academic disciplines influences the design, development and delivery of instruction. Master instructors must continue to study new theories and trends to ensure that their instructional knowledge stays current. In the first module in this block instructors will encounter additional learning theories and study educational psychology topics that are often misunderstood. The second module shines a light on emerging trends in education and training, and the impact of technology. Instructors will gain an understanding of how artificial intelligence, virtual reality and learning data analytics are changing the way learning is developed and delivered.

Learning Objectives/Outcomes

- 1) Analyse how contemporary learning theories and learning myths will impact the design and delivery of learning.
- 2) Evaluate how emerging technologies may be used to improve military education and training.

Issues for Consideration

- a) How do newer learning theories change the way that instruction should be delivered?
- b) What trends in educational technology may provide the most benefit for the military?

References/Readings

Goodell, J. & Kolodner, J. (2023). *Learning engineering toolkit: Evidence-based practices from the learning sciences, instructional design, and beyond*. Routledge.

Reigeluth, C. M. Beatty, B. J. & Myers, R.D. (Eds.). (2017). *Instructional design theories and models: The learner-centered paradigm of education*. Routledge.

Schatz, S. & Wolcott, J. J. (Eds.) (2019). *Modernizing learning - building the future learning ecosystem*. Government Publishing Office. <https://www.adlnet.gov/publications/2019/04/modernizing-learning/>



Module 1.1.1 Learning Theories

Description

Instructors learned experiential learning theories at the advanced level. At the master level, instructors should examine contemporary theories, principles and trends in adult education and training. Research in learning science, coupled with rapid advances in educational technologies, creates an ever-changing landscape of knowledge in the field of education. Unfortunately, the pace of change sometimes leads educators to adopt unproven theories or make unfounded claims about the technology. As such, instructors must learn to think critically about new learning theories and educational technologies.

Learning Objectives/Outcomes

- 1) Evaluate educational theories and practices labelled as learning myths.
- 2) Analyse contemporary learning and instructional theories.
- 3) Assess how the cognitive theory of multimedia learning is used with educational technology.

Issues for Consideration

- a) What learning myths are difficult to overcome?
- b) Why is the learner-centered paradigm considered an advancement in educational practices?
- c) What challenges are associated with learning trends such as gamification and microlearning?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

De Bruychere, P., Kirschner, P. A., & Hulshof, C. D. (2015). *Urban myths about learning and education*. Academic Press

Mayer, R. E. & Fiorella, L. (Eds.). (2022). *The Cambridge handbook of multimedia learning*. Cambridge University Press.

Quinn, C. N. (2018). *Millennials, goldfish & other training misconceptions: debunking learning myths and superstitions*. ATD Press.

Reigeluth, C. M. Beatty, B. J. & Myers, R.D. (Eds.). (2017). *Instructional design theories and models: The learner-centered paradigm of education*. Routledge.

Module 1.1.2 Emerging Innovations in Education and Training

Description

In the rapidly evolving landscape of training and education, staying abreast of emerging innovations is crucial for instructors and educational professionals. This module explores the latest trends, technologies and methodologies that are transforming the field of training and education. Instructors will delve into innovative approaches such as artificial intelligence, learning analytics, learning engineering, augmented reality and adaptive learning. By exploring these emerging innovations, instructors will gain insights into their potential benefits, challenges, and implications for instructional design and delivery.

Learning Objectives

- 1) Describe emerging innovations in educational practices and technologies.
- 2) Analyse the potential impact of innovation on military education and individual training.
- 3) Identify strategies for integrating emerging innovations into instructional practices.
- 4) Evaluate the ethical and privacy considerations associated with innovative educational technologies.

Issues for Consideration

- a) How can you separate educational fads from innovations that will transform education and training practices?
- b) What are some of the risks associated with being an early adopter of educational innovations?
- c) Given the unfounded claims about how technology would transform education, why should you believe claims about current innovations?
- d) How can instructors harness the power of learning analytics without cause harm to learners?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Clark, D. (2020). *Artificial intelligence for learning: How to use ai to support employee development*. Kogan Page.

Dede, C., Richard, J. & Saxberg, B.(Eds.) (2018). *Learning engineering for online education: Theoretical contexts and design-based examples*. Routledge.

Goodell, J. & Kolodner, J. (2023). *Learning engineering toolkit: Evidence-based practices from the learning sciences, instructional design, and beyond*. Routledge.

Niemi, D., Pea, R. D., Saxberg, B. & Clark, R.E. (2018). *Learning analytics in education*. Information Age Publishing.

Schatz, S. & Wolcott, J. J. (Eds.) (2019). *Modernizing learning - building the future learning ecosystem*. Government Publishing Office. <https://www.adlnet.gov/publications/2019/04/modernizing-learning/>



Torrance, M. (2023). *Data & analytics for instructional designers*. Association for Talent Development.

Block 1.2 Communication

Description

Master instructors serve in leadership roles managing education and training programmes. Those management duties require instructors at this level to spend more time communicating with and influencing decisions about training programmes at higher levels in the chain of command. As such, master instructors need to learn how to use communication to persuade decision makers. Furthermore, they may find themselves in situations where they need to engage in negotiations about requirements, resources or how the training mission will be executed. This block has two modules. The first module focuses on how to effectively communicate with senior stakeholders and the second module teaches instructors persuasion and negotiation skills.

Learning Objectives/Outcomes

- 1) Use strategic communication skills.
- 2) Employ techniques of negotiation, persuasion and influence.

Issues for Consideration

What are some of the challenges to influence and persuade leadership at the strategic level?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Conger, J. A. (1998). The necessary art of persuasion. *Harvard Business Review*, 76, 84-97.

Jones, P. (2008). *Communication strategy*. Routledge.

Moore, C. W. & Woddrow, P. J. (2010). *Handbook of global and multicultural negotiation*. Jossey-Bass

Module 1.2.1 Communicate with Stakeholders

Description

The majority of communication done by basic and advanced level instructors often focuses “down and in”. Master instructors however need to communicate “up and out” with stakeholders throughout the training system. Communication with stakeholders at higher levels of the chain of command is necessary to coordinate changes to existing training programmes and receiving guidance about creating new training programmes. Given the higher status of these engagements, master instructors must understand the potential use of communications technologies and how they shape and influence strategic communications.

Learning Objective

- 1) Describe how to build a network with training system organisations and stakeholders.
- 2) Explain the purposes of strategic communications for master instructors.
- 3) Describe how to use communication technologies for strategic communications.
- 4) Use strategic communication to influence others.

Issues for Consideration

- a) How does communicating internally differ from communicating externally for master instructors?
- b) How may generational differences influence the effectiveness of strategic communications?
- c) What barriers may prevent communicating with senior stakeholders?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Eder, M. K. (2007). Toward strategic communication. *Military Review* 87, 61-70.
- Jones, P. (2008). *Communication strategy*. Routledge.
- North Atlantic Treaty Organization (2010). *NATO military concept for strategic communication*.
- North Atlantic Treaty Organization (2011). *NATO strategic communication military capability implementation*.
- Ulmer, R. R., Sellnow, T. L., & Seeger, M. W. (2019). *Effective crisis communication: Moving from crisis to opportunity* (4th ed.). Sage Publications.

Module 1.2.2 Negotiation and Persuasion

Description

Master instructors play a significant role in shaping professional military education. Their years of experience coupled with a deep understanding of the training system enables them to serve as trusted advisors to senior leaders. Within a military E&IT system, master instructors will need to advocate for decisions that will improve the system and persuade others to support those arguments. In some circumstances they may need to negotiate the scope and scale of training changes that are made to Programmes of Classes or the training for an entire career field. Master instructors will also use negotiation and persuasion skills to manage change within their training organisations. This module explores the fundamental concepts, techniques and strategies of negotiation and persuasion.

Learning Objectives/Outcomes

- 1) Define negotiation and persuasion.
- 2) Explain the role of culture, values and context in negotiation and persuasion.
- 3) Identify the bargaining styles and tactics used in negotiations.
- 4) Identify the elements of a persuasive message.
- 5) Employ the negotiation and persuasion techniques.

Issues for Consideration

- a) What challenges may master instructors need to overcome in order to persuade senior leaders?
- b) What are common training system topics that will require negotiation?
- c) How should master instructors prepare for situation that will require negotiation and persuasion?
- d) What are the ethical considerations in the processes of negotiation and persuasion?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, role-plays and formal courses.

References/Readings

- Conger, J. A. (1998). The necessary art of persuasion. *Harvard Business Review*, 76, 84-97.
- Eisen, S. (2019) *Practical guide to negotiating in the military*. (3rd ed.) ed. Air University Press.
- Gass, R. H., & Seiter, J. S. (2018). *Persuasion: Social influence and compliance gaining*. Routledge.
- Goodwin, D. (2014). *Negotiation in international conflict: understanding persuasion*. Routledge.
- Jowett, G. S., & O'donnell, V. (2018). *Propaganda & persuasion*. Sage publications.
- Lewicki, R., Barry, B., & Saunders, D. (2009). *Negotiation: Readings, Exercises, and Cases*. McGraw-Hill Education.
- Moore, C. W. & Woddrow, P. J. (2010). *Handbook of global and multicultural negotiation*. Jossey-Bass.
- Shapiro, D. (2017). *Negotiating the nonnegotiable: How to resolve your most emotionally charged conflicts*. Penguin.
- Zhou, Y., He, H., Black, A. W., & Tsvetkov, Y. (2019). A dynamic strategy coach for effective negotiation. In *Proceedings of the 20th Annual SIGdial Meeting on Discourse and Dialogue*, (pp. 367–378). Stockholm, Sweden



THEME 2. Education & Individual Training Management Roles

Goals

The goal of this theme is to learn how to fulfill the management roles and responsibilities of a master instructor within the E&IT system.

Description

Instructors that attain the knowledge and skills to reach the master level will experience a shift in their role. They may continue to facilitate learning and hone their skills as an instructor; however, most master instructors will gain greater responsibility in managing the training system. This shift in duties results in master instructors leading execution of the SAT, serving as course directors or in other leadership positions in education and training organisations, or managing instructor development programmes. This theme is designed to provide the knowledge and skills necessary to succeed in those roles.

In the first block, instructors will learn how to oversee execution of the SAT. They will gain a deeper understanding of when each part of the SAT is necessary, how it should be performed, and how to monitor the quality of SAT products. Master instructors will often serve as course managers, overseeing all facets of course implementation. Therefore, the second block in this theme is focused on the duties and tasks that are performed by course managers. The final block in this theme, Instructor Management, is intended to provide master instructors with the knowledge and skills to create and manage a programme to support the selection, development, assessment, and management of instructors. Those skills and knowledge, coupled with the leadership skills developed throughout their careers, ensure that master instructors can lead the training institution.

Learning Objectives/Outcomes

- 1) Manage execution of the SAT processes.
- 2) Perform as a course director.
- 3) Lead an instructor talent management system.

Block 2.1 Systems Approach to Training Management

Description

Defining and delivering effective, efficient and affordable E&IT solutions to satisfy performance gaps is achieved through a SAT. Fully understanding the SAT process and its application in E&IT is essential for master instructors because they will have a significant role in overseeing execution of the SAT. This block builds on what instructors learned in the previous levels by examining how Global Programming is used to begin the SAT process. Instructors will also examine the activities performed in each SAT phase, the products produced during each phase, how to manage execution of each phase, and how to manage the entire system.

Learning Objectives/Outcomes

- 1) Use the outputs of Global Programming to initiate SAT activities.
- 2) Manage completion of analysis phase activities.
- 3) Manage completion of design phase activities.
- 4) Manage completion of development phase activities.
- 5) Manage completion of implementation phase activities.
- 6) Manage completion of analysis evaluation activities.

Issues for Consideration

- a) Why is systems thinking necessary to when implementing the SAT?
- b) When may some SAT activities be omitted from the process?
- c) How are the outputs from each phase used to initiate the next SAT phase?
- d) Is the SAT a linear process? Why or why not?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Berchev, D.I & Stefanov, M. (2019). The systems approach to training in the military educational system – Aggregation of integration processes. *Knowledge International Journal*, 30, 1457-1462. <https://doi.org/10.35120/kij30061457B>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Benschoter, B., King, K, & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

Reiser, R. A. & Dempsey, J. V. (Ed.) (2020). *Trends and Issues in Instructional Design and Technology* (4th ed.). Pearson.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.1.1 Global Programming

Description

Global Programming is how NATO identifies and manages the training needs of personnel from member and partner nations. Global programming ensures the right E&IT is provided to the right personnel, at the right time, in the right location and in the most economical manner possible. Global programming in this module refers to both NATO and national structures responsible for programming.

Global programming matches NATO requirements to training solutions through the execution of a governance process. This process oversees the selection and approval of courses that provide a training solution to a known gap identified as a requirement. Training is categorised into disciplines that organise the support structure available to the training. Each discipline has a requirements authority and a department head. Master instructors may play a role in influencing the global programming process by influencing how E&IT requirements are satisfied within the training system.

Learning Objectives/Outcomes

- 1) Describe the components of global programming.
- 2) Identify the NATO discipline structure.
- 3) Explain global programming management and governance.
- 4) Identify the roles and responsibilities of master instructors in the global programming process.
- 5) Determine E&IT requirements.

Issues for Consideration

- a) How may NATO's global programming process complement similar processes done within a nation?
- b) How may master instructors influence decisions that are made in the global programming process?
- c) Why is accurately identifying the performance gap an important part of global programming?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Allied Transformation Command (2023, June 1). *NATO's training system: Global programming*. <https://www.act.nato.int/global-programming>.



Berchev, D.I & Stefanov, M. (2019). The systems approach to training in the military educational system – Aggregation of integration processes. *Knowledge International Journal*, 30, 1457-1462. <https://doi.org/10.35120/kij30061457B>



Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 2 Needs Assessment, A-P9-050-000/PT-002*.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Benscoter, B., King, K, & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.1.2 Analysis Phase

Description

Global programming establishes the need for an E&IT solution. The next step in the SAT process is detailed analysis that provide the information necessary to design the E&IT. The first analysis performed establishes the performance outcomes that must be achieved. These outcomes are derived from the job tasks that must be performed and the E&IT outputs of the global programming process. Additional analysis is performed to identify the learner characteristics, learning content, and the learning context. This information is then used to craft an initial set of learning objectives and a course control document, which outlines a broad training strategy and the aim for a proposed E&IT solution.

Learning Objectives/Outcomes

- 1) Identify the roles and responsibilities of master instructors in the analysis phase.
- 2) Explain the purpose of each activity performed in the analysis phase.
- 3) Analyse the target audience.
- 4) Analyse job tasks.
- 5) Explain the purpose of a difficulty, importance and frequency (DIF) analysis.
- 6) Construct the course control document or similar analysis document.

Issues for Considerations

- a) What other analysis may be necessary to enable designing the E&IT solution?
- b) What analysis is performed in other stages of the SAT?
- c) Why is it important to ensure that the analysis is accurate?
- d) What quality control measures are necessary during the analysis phase?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Berchev, D.I & Stefanov, M. (2019). The systems approach to training in the military educational system – Aggregation of integration processes. *Knowledge International Journal*, 30, 1457-1462. <https://doi.org/10.35120/kij30061457B>



Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 2 Needs Assessment, A-P9-050-000/PT-002*.

Neelan, M. & Kirschner, P. A. (2020, September 1). *Cognitive task analysis: An overlooked gem*. 3-Star Learning Experiences. <https://3starlearningexperiences.wordpress.com/2020/09/01/cognitive-task-analysis-an-overlooked-gem/>



North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Benscoter, B., King, K, & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

Jonassen, D. H., Tessmer, M., & Hannum, W. H. (1998). *Task analysis methods for instructional design*. Routledge.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.1.3 Design Phase

Description

The outputs of the analysis phase provide the information that is necessary to begin designing the E&IT solution. The performance outcomes, learner analysis, content analysis and context provide the information that guides creation of learning objectives, assessments plans, instructional strategies and learning activities. During this phase, decisions are also made about how time will be allocated for the instruction and the resources necessary to implement the E&IT solution. All of the design decisions are made within the constraints that were identified during the analysis phase. The output of the design phase is one or more documents that serve as a blueprint for the products that are created during the development phase.

Learning Objectives/Outcomes

- 1) Identify the roles and responsibilities of master instructors in the design phase.
- 2) Explain the purpose of each activity performed in the design phase.
- 3) Review the purpose of defining learner characteristics.
- 4) Describe content sequencing strategies and when to use each strategy.
- 5) Review how to create an instructional strategy.
- 6) Construct a Course Control Document (CCD) 3 or similar design blueprint.

Issues for Consideration

- a) Why should the outputs of the analysis phase be used to guide the design?
- b) What are the most difficult decisions to make when designing instruction?
- c) How may educational technology be used to overcome some of the design constraints?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Berchev, D.I & Stefanov, M. (2019). The systems approach to training in the military educational system – Aggregation of integration processes. *Knowledge International Journal*, 30, 1457-1462. <https://doi.org/10.35120/kij30061457B>



Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 4 Design of instructional programs, A-P9-050-000/PT-004*.

Dirksen, J. (2016). *Design for how people learn* (2nd ed.). New Riders.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Benschoter, B., King, K, & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

Stolovitch, H. D. & Keeps, E. J. (2011). *Telling ain't training, 2nd edition: Updated, expanded, enhanced*. Association for Talent Development.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.1.4 Development Phase

Description

The design phase outputs are one or more documents that describe the instructional products that are necessary for the E&IT solution to be implemented. In the development phase, those products are obtained or produced. Typical products include learner and instructor guides, assessments, multimedia, videos and job aids. Some solution may include products such as virtual reality simulations that require significantly more resources to develop. Complex learning solutions may also require obtaining the hardware and software necessary to implement the learning design. The development phase should also include preparing staff and conducting one or more pilots of the new learning solution. Lessons learned from the pilot should result in making adjustments to the learning solution prior to full implementation. In this module, instructors will learn about creating learning products and how to conduct pilot of new learning solutions.

Learning Objectives/Outcomes

- 1) Identify the roles and responsibilities of master instructors in the development phase.
- 2) Describe learning products that may be created.
- 3) Analyse the risks and resources necessary to develop each type of learning product.
- 4) Explain how to prepare for and conduct a pilot implementation of a new learning solution.
- 5) Manage creation of products that are required in the development phase.

Issues for Consideration

- a) How may risks associated with rework be reduced during product development?
- b) Why is user testing important during the development phase?
- c) How may agile development techniques be beneficial when creating learning products?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Berchev, D.I & Stefanov, M. (2019). The systems approach to training in the military educational system – Aggregation of integration processes. *Knowledge International Journal*, 30, 1457-1462. <https://doi.org/10.35120/kij30061457B>



Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 5 Development of instructional materials, A-P9-050-000/PT-005*.

Malamed, C. (2015). *Visual design solutions: Principles and creative inspiration for learning professionals*. John Wiley & Sons.

Mayer, R. E. (2020). *Multimedia learning* (3rd ed.). Cambridge University Press.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Benscoter, B., King, K, & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

Shank, P. (2022, August 15). *Creating better video for learning, part 1*. eLearning Industry. <https://elearningindustry.com/creating-better-video-for-learning-part-1>



United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.1.5 Implementation Phase

Description

The purpose of the implementation phase is to employ the management, support and administrative functions necessary to successfully conduct E&IT solutions. The majority of this curriculum is focused on the implementation phase activities conducted by instructors; however master instructors will also need to manage the administrative and support requirements that are necessary to successfully run a course. In this module, instructors will examine the planning, preparation and closeout activities that must be completed or managed by master instructors. The outcome of the implementation phase is the production of qualified graduates.

Learning Objectives/Outcomes

- 1) Identify the roles and responsibilities of master instructors managing the implementation phase.
- 2) Analyse the administrative and support requirements that must be completed to conduct a course.
- 3) Identify the planning and preparation activities that must be completed.
- 4) Explain the closeout activities that must be conducted after a course.

Issues for Consideration

- a) How may an instructor overcome resource constraints when planning a course delivery?
- b) How does planning a resident course differ from planning a distributed or blended course delivery?
- c) Why should staff and instructors training be part of preparing for a course delivery?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 6 Conduct of instructional programs, A-P9-050-000/PT-006*.
- North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.
- Huggett, C. (2022). *The facilitator's guide to immersive, blended, and hybrid learning*. Association for Talent Development.
- Rothwell, W., Bencoter, B., King, K., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.
- Stolovitch, H. D. & Keeps, E. J. (2011). *Telling ain't training, 2nd edition: Updated, expanded, enhanced*. Association for Talent Development.
- United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.1.6 Evaluation Phase

Description

The purpose of the evaluation phase is to assess the efficiency, effectiveness and affordability of an E&IT solution and determine how it can be improved. This module will provide an in-depth understanding of the evaluation process. Participants will learn about the importance of evaluation, different evaluation methods, data collection techniques and how to analyse and interpret evaluation results. At the end of this module, participants will be equipped with the knowledge and skills to conduct effective evaluations to measure the impact and success of their training programmes.

Learning Objectives/Outcomes

- 1) Identify the roles and responsibilities of master instructors managing the evaluation phase.
- 2) Describe how quantitative and qualitative data are used to evaluate a course.
- 3) Explain the evaluation instruments that are used to collect data.
- 4) Analyse evaluation data to determine recommended changes for a course or curriculum.

Issues for Consideration

- a) What is the relationship between learner reactions and learning?
- b) What are the risks associated with not using enough data sources during evaluation?
- c) Who should you collect data from to evaluate a course?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Brinkerhoff, R. O. (2006). *Telling training's story: Evaluation made simple, credible, and effective*. Berrett-Koehler Publishers.

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 11 Evaluation of instructional programs, A-P9-050-000/PT-0011*.

Farrington, J. (2023, June 1). Have training: What should we measure?. J. Farrington Consulting. <https://www.jfarrington.com/2014/08/have-training-what-should-we-measure/>



Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. Alexandria, VA: ATD Press.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Phillips, J. & Phillips, P. P. (2022). *Handbook of training evaluation and measurement methods* (4th ed.). Routledge.

Thalheimer, W. (2018). *The learning-transfer evaluation model: Sending messages to enable learning effectiveness*. Work-Learning Research. <https://www.worklearning.com/wp-content/uploads/2018/02/Thalheimer-The-Learning-Transfer-Evaluation-Model-Report-for-LTEM-v12.pdf>



Block 2.2 Course Management

Description

In many military education and training institutions master instructors will serve as course directors, charged with managing course development and implementation. This block is comprised of two modules designed to prepare instructors for their course management duties. In the first module, instructors will examine the roles and responsibilities that they have in managing courses and other aspects of the education and training organisation. The second module, Course Management Tasks, provides an instructor an overview of how to oversee the administrative, support and delivery tasks that are necessary to successfully deliver E&IT solutions.

Learning Objectives/Outcomes

- 1) Identify course management roles and responsibilities.
- 2) Identify the administrative, support and delivery tasks that must be managed.
- 3) Oversee course delivery.

Issues for Consideration

- a) What are some of the challenges associated with managing courses?
- b) How may a master instructor continue to grow as an instructor while serving as a course director?
- c) How should master instructors participate in development of education and training policies that impact course management?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 13 Administration of Individual Training and Education (IT&E) Establishments and Programmes, A-P9-050-000/PT-0013*.

Chief of the Defence Staff Canadian Defence Academy (2007). *Leadership in the Canadian Forces: Leading people. National Defence*.

Horn, B. & Walker, R. W. (Eds.) (2008). *The military leadership handbook*. Canadian Defence Academy Press.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Benscoter, B., King, K., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.2.1 Course Director Roles and Responsibilities

Description

Course directors have a myriad of responsibilities that are required to oversee military E&IT programmes. In this module, instructors will examine the roles and responsibilities of course directors. Course management duties often fall into administrative, support and conduct categories. A course director must know what needs to be done in each of those categories during course planning, preparation, conduct and closeout. Instructors will learn essential skills and knowledge needed to effectively plan, coordinate and oversee the delivery of military training programmes.

Learning Objectives/Outcomes

- 1) Identify the roles and responsibilities of a course director.
- 2) Explain the course director's role in planning, preparing, delivering and closing out a course.
- 3) Describe how course directors oversee course delivery.
- 4) Analyse the course director's role in managing the resources necessary to conduct a course.

Issues for Consideration

- a) What are the most difficult challenges when transitioning into a course director role?
- b) How does a course director ensure their responsibilities are fulfilled for METT?
- c) What are some ways that a course director can address resource constraints that impact course delivery?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 13 Administration of Individual Training and Education (IT&E) Establishments and Programmes, A-P9-050-000/PT-0013*.

Horn, B. & Walker, R. W. (Eds.) (2008). *The military leadership handbook*. Canadian Defence Academy Press.

Chief of the Defence Staff Canadian Defence Academy (2007). *Leadership in the Canadian Forces: Leading people. National Defence*.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Benschoter, B., King, K., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Module 2.2.2 Course Management Tasks

Description

Military leaders are familiar with planning and managing operations; however, they will encounter unfamiliar tasks when directing courses in a military education and training organisation. In this module, instructor will learn about the tasks that they must perform or manage to successfully deliver education and training courses. Those tasks include administrative items such as registering learners for courses, support items such as coordinating training areas and support staff, and tasks associated with delivering instruction. By the end of the module, instructors should know what tasks are necessary to ensure a course is conducted effectively.

Learning Objectives/Outcomes

- 1) Identify the administrative tasks managed by the course director.
- 2) Identify the support tasks managed by the course director.
- 3) Describe the delivery tasks managed by the course director.
- 4) Coordinate personnel and resources to support the successful delivery of training programmes.
- 5) Manage programme documentation and lessons learned.

Issues for Consideration

- a) What are some of the challenges associated with performing course director tasks?
- b) What tasks should be delegated to others and what tasks must be performed by the course director?
- c) Discuss some of the challenges in fulfilling the role of course director and concurrently managing the delivery of multiple courses?
- d) How can some of the challenges identified in (c) be addressed?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Chief of the Defence Staff. (n.d.). *CFITES Manual of Individual Training and Education, Volume 13 Administration of Individual Training and Education (IT&E) Establishments and Programmes, A-P9-050-000/PT-0013*.

Horn, B. & Walker, R. W. (Eds.) (2008). *The military leadership handbook*. Canadian Defence Academy Press.

Chief of the Defence Staff Canadian Defence Academy (2007). *Leadership in the Canadian Forces: Leading people. National Defence*.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rothwell, W., Bencoter, B., King, K., & King, S. B. (2016). *Mastering the instructional design process: A systematic approach* (5th ed.). Wiley.

United States Marine Corps (2004). *System approach to training (SAT) manual*.

Block 2.3 Instructor Management

Description

The journey from being an instructor in a unit to master instructor requires having systems in place that permit the selection, development, assessment and management of instructors. An instructor selection process provides opportunities to ensure that personnel assigned to serve as instructors have the characteristics necessary to succeed in a teaching role. Once selected to serve as an instructor, personnel need to follow a development path that uses training, education and experience to grow from the basic level to the master level. Along that journey instructors must be assessed to determine how well they are performing and when they have met the performance requirements to be certified as a basic, advanced or master instructor.

Military members serving as instructors will often return to operational units after serving several years in a military school. This ensures that they keep their technical knowledge current; however, the best instructors should return to instructor assignment later in their careers. This is particularly important in NCO professional military education systems that have courses for senior level NCOs. Therefore, the instructor development system also needs to have a mechanism to manage instructors throughout their careers.

This block consists of the following modules: Instructor Selection; Instructor Development; Instructor Certification and Instructor Talent Management.

Learning Objectives/Outcomes

- 1) Determine an instructor selection process.
- 2) Design an instructor development programme.
- 3) Create an instructor assessment process.
- 4) Determine what instructor talent management strategies will be used in the instructor development programme.

Issues for Consideration

- a) How can an interview process to select instructors be used within the military personnel system?
- b) How long does it take for an instructor to obtain each level of certification?

- c) How can the instructor development system be used to support unit training?
- d) What are the challenges associated with having new instructors teaching at the highest levels of the professional military education system?

Learning Methodology/Assessments

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Air Force Learning Professionals (2023, June 1). *Instructor development*. <https://www.learningprofessionals.af.mil/Resources/Instructor-Development/>



Department of the Army (2018). *TRADOC Regulation 600-21, Faculty Development and Recognition Program*.

Keller-Glaze, H., Bryson, J., Riley, R., Horey, J. & Bickley, W. R. (2016). *Research Report 1987 Identifying, preparing and evaluating army instructors*. Army Research Institute.

Klein, J. D., Spector, J. M., Grabowski, B. & de la Teja, I. (2004). *Instructor competencies. Standards, for face-to-face, online, and blended settings*. Information Age Publishing.

North Atlantic Treaty Organization (2015). *Bi-SC Education and Individual Training Directive (E&ITD) 075-007*.

Rankin, K. J., Rounding, K., & Ford, C. (2019). *Military instructors. Understanding motivation and job satisfactions across two nations*. Defence Research and Development Canada.

Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

Module 2.3.1 Instructor Selection

Description

This module aims to provide guidance on the process of selecting personnel to serve as instructors. Participants will learn about the critical factors to consider when identifying and evaluating potential instructors, including their qualifications, competencies and instructional skills. The module will cover methods for identifying candidates, conducting interviews, and making decisions about who is best suited to serve as an instructor. At the end of this module, participants will be equipped with the knowledge and tools to effectively select personnel for instructor roles.

Learning Objectives/Outcomes

- 1) Analyse the relationship between instructor quality and training effectiveness.
- 2) Identify the key qualifications and competencies required for effective instructors.
- 3) Describe how to pre-screen instructor candidates.
- 4) Develop a structured interview for instructors.

Issues for Consideration

- a) What selection processes are feasible within the military personnel system?
- b) What role should master instructors play in selecting instructors?
- c) What are the benefits and risks of asking candidates to demonstrate their teaching skills?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

- Barron, L., Young, J., Rose, M. & Johnson, J. (2018). U.S. Air Force Military Training Instructor and Instructor Trainer Competencies: Training the Instructors of the Next Generation of Airmen. *Journal of Military Learning*, October-2018, 58-79.
- Department of the Army (2016). *TRADOC Regulation 600-21, Noncommissioned Officer Education System Instructor Development And Recognition Program*.
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 met-analyses relating to achievement*. Routledge.
- Keller-Glaze, H., Bryson, J., Riley, R., Horey, J. & Bickley, W. R. (2016). *Research Report 1987 Identifying, preparing and evaluating army instructors*. Army Research Institute.
- Klassen, R. M. & Kim, L. E. (2021). *Teacher selection: Evidence-based practices*. Springer.
- Klein, J. D., Spector, J. M., Grabowski, B. & de la Teja, I. (2004). *Instructor competencies. Standards, for face-to-face, online, and blended settings*. Information Age Publishing.
- Stronge, J. H. & Hindeman, J. L. (2006). *The teacher quality index: A protocol for teacher selection*. Association for Supervision and Curriculum Development.

Module 2.3.2 Instructor Development

Description

Instructor selection helps identify personnel that are more likely to be successful instructors; however, all instructors need opportunities to continue to learn about education and training. An ideal instructor development programme provides opportunities for formal education and training, observation and feedback, informal peer coaching, and supports the growth of an instructor from the basic level to the master level. This module may be used to create the development programme.

Learning Objectives/Outcomes

- 1) Identify the competencies, skills and knowledge for each instructor level.
- 2) Identify learning opportunities that align with the instructor levels.
- 3) Design the development programme.
- 4) Develop instructor courses and learning experiences (as needed).

Issues for Consideration

- a) How does the instructor development programme support continuous learning?
- b) What is the relationship between instructor development levels and the professional military education system?
- c) How should the effectiveness of the development programme be measured?
- d) How may you partner with universities and public institutions for instructor development?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Air Force Learning Professionals (2023, June 1). *Instructor development*. <https://www.learningprofessionals.af.mil/Resources/Instructor-Development/>



Department of the Army (2018). *TRADOC Regulation 600-21, Faculty Development and Recognition Program*.

Klein, J. D., Spector, J. M., Grabowski, B. & de la Teja, I. (2004). *Instructor competencies. Standards, for face-to-face, online, and blended settings*. Information Age Publishing.

Patrick, J., Scrase, G., Ahmed, A. & Tombs, M. (2009). Effectiveness of instructor behaviours and their relationship to leadership. *Journal of Occupational and Organizational Psychology*, 82(3), 491-509. <https://doi.org/10.1348/096317908X360693>



Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

Van Der Werff, J. & Bogdan, E. (2018). Fostering instructor competencies through Army University's faculty development program. *Journal of Military Learning*, April-2018, 44-52.

Module 2.3.3 Instructor Certification

Description

The risks that result from ineffective instruction in the military are significant. Poorly educated and trained military members could cause unnecessary loss of life and may negatively impact national security. Therefore, it is essential that the military certifies instructors before they are allowed to teach independently. At a minimum, the technical, educational, ethical and leadership knowledge and skills of instructors should be evaluated before they are permitted to teach.

Many instructor certification programmes use a three-step approach. The first step is that the instructor must graduate from course that they will teach. The next step is that they will co-teach the course with a certified instructor. The certified instructor will ensure that the new instructor is able to correctly teach or facilitate the course lessons. The last step is that the instructor will be evaluated by a master instructor while teaching. Once an instructor is certified, periodic observations are conducted to ensure the instructor is performing well.

Certification programmes may also be aligned to the instructor performance levels. For example, the certification of a master instructor will have different requirements than the certification of a basic instructor. In this module, instructors will learn how to design and implement an instructor certification programme.

Learning Objectives/Outcomes

- 1) Describe the purpose of an instructor certification programme.
- 2) Identify the levels and performance requirements for a certification programme.
- 3) Design an instructor observation rubric.
- 4) Design procedures for instructor evaluations.
- 5) Develop certification requirements and policies for each level of the certification programme.

Issues for Consideration

- a) How frequently should instructors be evaluated?
- b) What role should learner observations play in evaluating instructor performance?
- c) What data, other than observations, may be used to evaluate instructors?

- d) How can you determine whether the instructor completed lesson preparation correctly?
- e) What steps should be taken if an instructor is not performing well?
- f) Does an instructor certification programme guarantee that learners will learn?

Learning Methodology/Assessment

Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.

References/Readings

Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.

Department of the Army (2018). *TRADOC Regulation 600-21, Faculty Development and Recognition Program*.

Klein, J. D., Spector, J. M., Grabowski, B. & de la Teja, I. (2004). *Instructor competencies. Standards, for face-to-face, online, and blended settings*. Information Age Publishing.

Little, O., Goe, L. & Bell, C. (2009). *A practical guide to evaluating teacher effectiveness*. National Comprehensive Center for Teacher Quality. <https://files.eric.ed.gov/fulltext/ED543776.pdf>



Schatz, S. Bartlett, K., Burley, N., Dixon, D. & Knarr, K. (2012, December 3-6). *Making good instructors great: USMC cognitive readiness and instructor professionalization initiatives* [Conference presentation]. Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC), Orlando, FL, United States.

Van Der Werff, J. & Bogdan, E. (2018). Fostering instructor competencies through Army University's faculty development program. *Journal of Military Learning*, April-2018, 44-52.

University of Michigan Center for Research on Learning & Teaching (2023, June 10). *Methods of evaluating teaching*. <https://crlt.umich.edu/resources/evaluation-teaching/methods>



Module 2.3.4 Instructor Talent Management

Description

One of the greatest challenges in the military is talent management of instructors. Several competing factors make it difficult to ensure that highly skilled personnel are selected to serve as instructors. The first challenge is that leaders in operational units rarely want the highest performing military members to be reassigned. Therefore, military education and training organisations are competing with operational units for the most skilled members. Those personnel that are the most effective instructors often only serve one assignment in a military education and training organisation because they must return to an operational unit to continue development within their military career fields. In some cases, serving as a military instructor may be perceived as detrimental to career progression.

Given that developing expertise as an instructor takes many years, this module is designed to help instructors determine the actions that may be performed to ensure instructors are rewarded for service in that role and that the best instructors are considered for additional assignments in a military education and training organisation. Instructors will learn about the strategies that they can implement to attract and retain instructors while also considering how to create succession plans for the most important instructor positions.

Learning Objectives/Outcomes

- 1) Identify how human resource policies impact instructor assignments and development.
- 2) Analyse the incentives and disincentives to serving as an instructor.
- 3) Evaluate how to align your instructor selection, development and management policies within the human resource policies.
- 4) Identify incentives that you can implement in the instructor management programme.
- 5) Develop succession plans to ensure a pipeline of skilled instructors.
- 6) Explain how to advocate for changes to policies that will improve instructor development and recognition.

Issues for Consideration

- a) How can effective instructor development be beneficial for commanders in operational units?
- b) What military culture factors influence the perception of serving as an instructor?
- c) Why should being an effective instructor be considered as important as any other military career field?
- d) What roles do coaching and mentoring play in instructor talent management?

Learning Methodology/Assessment


Teaching delivery methods may include self-study, lectures, small group discussions, case studies, in-class exercises, formal courses and individual studies.



























References/Readings

- Bickham. T. (Ed.) (2021). *ATD talent management handbook*. Association for Talent Development
- Department of the Army (2018). *TRADOC Regulation 600-21, Faculty Development and Recognition Program*.
- Keller-Glaze, H., Bryson, J., Riley, R., Horey, J. & Bickley, W. R. (2016). *Research Report 1987 Identifying, preparing and evaluating army instructors*. Army Research Institute.
- Rankin, K. J., Rounding, K., & Ford, C. (2019). *Military instructors. Understanding motivation and job satisfactions across two nations*. Defence Research and Development Canada.
- Shula, D., & Blanchard, K. (1995). *Everyone's a coach*. Zondervan Publishing House.



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