

Version 2.0

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1. Introduction

This unit focuses on competencies the Clinician Educator needs in order to be an effective teacher in multiple contexts in a manner appropriate to a range of learners, settings, and teaching media. The unit places emphasis on evidence-based teaching and current best practices to maximize engagement and learning.

2. Prerequisite units

Foundations 1 (co-requisite)

3. CE competencies addressed in this unit

The CE must be able to:

1. Teach effectively using different techniques within different contexts
2. Provide effective feedback

2. Learning objectives

By the end of this Unit, the CE will be able to:

1. Teach effectively using at least three different instructional methods for different contexts (according to the candidate's educational settings)

- clinical-based teaching
- large-group teaching
- workshop teaching
- small-group teaching
- one-on-one teaching
- procedural skills teaching
- e-learning
- other as appropriate

The candidate should be able to:

- describe the indications, advantages, and disadvantages of each selected method within the relevant educational contexts
- describe the theory or evidence for best practices relating to each method
- regularly incorporate best practices into his or her teaching

- discuss the common pitfalls of each selected method
- demonstrate how to incorporate the CanMEDS framework within his or her teaching
- use effective questioning techniques to foster learner engagement and effective learning
- develop a teaching plan for a planned learning activity

2. Demonstrate a reflective education practice, by

- describing the principles and importance of reflective practice
- applying the principles of reflective practice in his or teaching

3. Demonstrate awareness of faculty development issues by

- describing the unique challenges faced by teaching colleagues
- demonstrating the ability to skillfully facilitate groups of peers

4. Demonstrate comprehension of the principles of feedback, by

- describing the principles of good feedback
- incorporating best practices in feedback, including giving feedback in challenging settings (e.g., a learner in difficulty)

5. Suggested resources

Clinical teaching: *Medical Journal of Australia* "Teaching on the run" series

Lake FR. Teaching on the run tips: doctors as teachers. *Med J Aust.* 2004;180(8):415–6.

Lake FR, Ryan G. Teaching on the run tips 2: educational guides for teaching in a clinical setting. *Med J Aust.* 2004;180(10):527–8.

Lake FR, Ryan G. Teaching on the run tips 3: planning a teaching episode. *Med J Aust.* 2004;180(12):643–4.

Lake FR, Ryan G. Teaching on the run tips 4: teaching with patients. *Med J Aust.* 2004;181(3):158–9.

Lake FR, Hamdorf JM. Teaching on the run tips 5: teaching a skill. *Med J Aust.* 2004;181(6):327–8.

Lake FR, Hamdorf JM. Teaching on the run tips 6: determining competence. *Med J Aust.* 2004;181(9):502–3.

Lake FR, Vickery AW, Ryan G. Teaching on the run tips 7: effective use of questions. *Med J Aust.* 2005; 182(3):126–7.

Lake FR, Ryan G. Teaching on the run tips 8: assessment and appraisal. *Med J Aust.* 2005;182(11):580–1.

Lake FR. Teaching on the run tips 9: in-training assessment. *Med J Aust.* 2005;183(1):33–4.

Vickery AW, Lake FR. Teaching on the run tips 10: giving feedback. *Med J Aust.* 2005;183(5):267–8.

Lake FR, Ryan G. Teaching on the run tips 11: the junior doctor in difficulty. *Med J Aust.* 2005;183(9):475–6.

Lake FR, Ryan G. Teaching on the run tips 12: planning for learning during clinical attachments. *Med J Aust.* 2006;184(5):238–9.

Lake FR, Ryan G. Teaching on the run tips 13: being a good supervisor—preventing problems. *Med J Aust.* 2006;184(8):414–5.

Lake FR, Vickery AW. Teaching on the run tips 14: Teaching in ambulatory care. *Med J Aust*. 2006;185(3):166-7.

Clinical teaching: selected articles

Bandiera G, Lee S, Tiberius R. Creating effective learning in today's emergency departments: how accomplished teachers get it done. *Acad Emerg Med*. 2005;45(3):253-61.

Dent JA. AMEE Guide No 26: clinical teaching in ambulatory care settings: making the most of learning opportunities with outpatients: *Med Teach*. 2005;27(4):302-15.

Heidenreich C, Lye P, Simpson D, Lourich M. The search for effective and efficient ambulatory teaching methods through the literature. *Pediatrics*. 2000;105 (1 Pt 3):231-7.

Irby DM. Teaching and learning in ambulatory care settings: a thematic review of the literature. *Acad Med*. 1995;70(10):898-931.

Irby DM. What clinical teachers in medicine need to know. *Acad Med*. 1994;69(5):333-42.

Neher JO, Gordon KC, Meyer B, Stevens N. A five-step "microskills" model of clinical teaching. *J Am Board Fam Pract*. 1992;5(4):419-24.

Reznick RK, MacRae H. Teaching surgical skills—changes in the wind. *N Engl J Med*. 2006;355(25):2664-9.

Sachdeva AK. Use of effective questioning to enhance the cognitive abilities of students. *J Cancer Educ*. 1996;11(1):17-24.

Vaughn LM, Baker RC. Do different pairings of teaching styles and learning styles make a difference? Preceptor and resident perceptions. *Teach Learn Med*. 2008;20(3):239-47.

Extraclinical teaching

Lecturing

Caldwell JE. Clickers in the classroom: current research and best-practice tips. *CBE Life Sci Educ*. 2007;6(1):9-20.

Di Leonardi BC. Tips for facilitating learning: the lecture deserves some respect. *J Contin Educ Nurs*. 2007;38(4):154-63.

Premkumar K, Coupal C. Rules of engagement: 12 tips for successful use of "clickers" in the classroom. *Med Teach*. 2008;30(2):146-9.

Schreiber BE, Fukuta J, Gordon F. Live lecture versus video podcast in undergraduate medical education: a randomized controlled trial. *BMC Med Educ*. 2010;10:68.

Steinert Y, Snell L. Interactive lecturing: strategies for increasing participation in large group presentations. *Med Teach*. 1999;21(1):37-42.

Other

Cook DA. Where are we with Web-based learning in medical education? *Med Teach*. 2006;28(7):594-8.

Srinivasan M, Li ST, Meyers FJ, Pratt DD, Collins JB, Braddock C, et al. "Teaching as a Competency": competencies for medical educators. *Acad Med*. 2011;86(10):1211-20.

Reflective practice

Johns C. *Becoming a reflective practitioner: a reflective and holistic approach to clinical nursing, practice development and clinical supervision*. Oxford: Blackwell Science; 2000.

Schon DA. *Educating the reflective practitioner: toward a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass; 1987.

Faculty development

Steinert Y, Mann K, Centeno A, Dolmans D, Spencer J, Gelula M, et al. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Medical Teacher*. 2006;28(6):497–526.

Online resources

BMJ Learning	http://learning.bmj.com/learning/home.html
The Expert Preceptor Interactive Curriculum (University of North Carolina School of Medicine)	www.med.unc.edu/epic/welcome.htm
London Deanery Faculty Development	www.faculty.londondeanery.ac.uk/e-learning/teaching-clinical-skills
Medical Education (collaborative website)	http://medicaleducation.wetpaint.com/page/Clinical+Teaching+Techniques
Practical Doc: by rural doctors, for rural doctors (Alberta Rural Physician Action Plan)	www.practicalprof.ab.ca

Principles

Dojeiji S, Cooke L. The core: a tour of instructional methods for clinical education. In: Sherbino J, Frank JR, editors. *Educational Design*. Ottawa: Royal College of Physicians and Surgeons of Canada: 2011. p. 35–44.

Thomas D, Brown JS. *A new culture of learning: cultivating the imagination for a world of constant change*. n.p.: CreateSpace: 2011.

6. Learning Activities

Formal

- The candidate must engage in a structure, formalized activity or a series of activities related to instructional methods relevant to a CE's practice environment. A separate learning activity or activities should specifically focus on providing feedback. The activities should include interactions with other learners and teachers. The activities will facilitate a deeper engagement of the material. The learning activities can include, for example, workshops, courses, e-learning programs, or other activities associated with a faculty development program, or a national specialty society or education conference. The learning activity or activities must be pre-approved by the CE AFC program. To assist in standardizing the scope of the required learning activities among CE AFC programs the typical time requirement for the formal learning activities is 6 hours.

Applied

To complete this unit, the candidate must:

1. Design strategies to engage learners and apply these strategies in three different educational settings. The candidate must document the challenges and the strategies adopted, and reflect on their impact on his or her development as a teacher.
2. Seek evaluation on his or her teaching
 - from learners
 - from peers/education experts
3. Provide formative feedback to a learner on at least three different occasions and create a de-identified record of the feedback

7. Assessment

Formative

During this unit candidates should meet regularly with their unit advisor (a minimum of four 30-minute meetings or equivalent) to:

- discuss and receive feedback on their understanding of key ideas in instructional methods
- check their progress in achieving the learning objectives of this unit
- monitor their progress in the applied learning activities

Documentation of these interactions and their outcomes is required (through the Final Unit Report).

Summative

Candidates must submit e-documentation of the following via their electronic portfolio:

1. Proof of successful completion of the formal learning activities (via the Final Unit Report and not as a separate entry.)
2. A reflective essay or multimedia report describing instructional methods for three different learning environments, as detailed above
3. Teaching evaluations from five learners pertaining to at least two different teaching methods
4. Teaching evaluations from two peers using at least two different teaching methods
5. A de-identified record of feedback to a learner, based on at least three encounters
6. Final Unit Report: a narrative report from the unit advisor using the prescribed template indicating that the candidate has successfully completed the unit.

8. Criteria for a unit supervisor

Education qualifications: extensive teaching experience in multiple modalities.

Experience: A proven record of teaching excellence (promotion, awards, or widespread reputation for teaching excellence as determined by the CE AFC program).

The CE AFC program must assess the appropriateness of the proposed unit advisor and submit the relevant certificate.

9. Unit designation

Core

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