

Teaching outside the clinical setting

Twelve steps to feeling more comfortable and capable with any invitation to teach, based on the Fundamental Teaching Activities Framework

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With the adoption of competency-based medical education across Canada, and with the Future of Medical Education in Canada¹ recommendation to value generalism in medicine, family physicians are increasingly being called upon to teach medical students, residents, fellows, and other faculty members in nonclinical settings. However, despite a considerable amount of literature on physician teaching,²⁻⁶ most clinicians receive no orientation for this task and might decline teaching invitations as a result. This article presents several scenarios to outline a practical step-by-step approach to teaching outside the clinical setting, based on the recent Fundamental Teaching Activities Framework (Figure 1).⁷

Scenario 1: Prepare teaching session

You are a newly graduated physician who is doing a locum. One of your colleagues asks you if you could teach a small group session on smoking cessation to second-year medical students next week. You will be given the materials (slide show presentation and props). After your initial panic, you realize that teaching to second-year medical students (who surely must know less than you do about smoking cessation) is actually an excellent way to plunge into teaching.

Here are the first 4 steps, which will help you to prepare for the teaching session.

Step 1. Anticipate your audience. Who is your expected audience? It is of utmost importance to adapt your teaching to the audience; for example, if you are speaking to a community group interested in smoking cessation, the tone you use and the content you choose to present should be different from what you present when you are speaking to a group of family medicine residents. This step is also a general needs assessment

(an academic way of saying that you are considering what your learners need to know).

Step 2. Clarify your objectives. What are the learning objectives? Every teaching session should have goals, usually about 3 goals for each hour of formal curriculum. In this case, the goals should be clearly outlined in the slide show presentation with which you are provided. If they are not, you need to develop them. Developing learning objectives is beyond the scope of this article, but their format should follow the SMART mnemonic⁸ (specific, measurable, assignable, realistic, time-related), they should be clearly written, and they should be stated at the beginning of the session to orient the learners.

Step 3. Make the material yours. Adopt the material so that it is yours. You will give a much better teaching session if you take some ownership and command of the material. In this case, you are given the slide show presentation, so you should review it well and ideally talk to others who have given the session previously. Depending on the time you have available to prepare, you could also try to anticipate some of the different perspectives that learners might have, to think about the hidden curriculum,⁹ to consider what material might be missing, and to attempt to integrate generic terms (eg, *nicotine replacement therapy*) instead of brand name pharmaceuticals.

Step 4. Plan to engage your audience. Prepare your teaching techniques and strategies. Learners will get more out of the session if they are engaged with the material, so minimize the didactic presentation to increase audience participation. Some suggestions include a round-table introduction during which each participant relates an experience with smoking cessation (either personal or one of a friend or relative); ask questions that will be answered on the upcoming slide before you show it (eg, "Tell me some of the risks associated with smoking"); integrate an activity in which participants write down the key teaching point they have retained from the session and have them share their answers with each other before discussing in a larger group.



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Figure 1. Teaching outside the clinical setting, based on the Fundamental Teaching Activities Framework

Domain: TEACHER OUTSIDE THE CLINICAL SETTING	Applies basic educational principles to each teaching activity	Applies basic and advanced educational principles to each teaching activity	Demonstrates leadership and scholarship in teaching activities
Task: Teacher – Design and delivery of teaching sessions outside the clinical setting (eg, tutorials and seminars, simulations, large groups, lectures, e-learning) with students, residents, faculty, and other learners			
Prepares teaching session (Before)	<ul style="list-style-type: none"> ▲ Collects information about expected audience ▲ Comprehends learning objectives and adapts them for the expected audience ▲ Reviews teaching materials developed by others ▲ Prepares teaching techniques and strategies ▲ Demonstrates awareness of hidden curriculum and considers its impact on student learning 	<ul style="list-style-type: none"> ▲ Identifies learning needs and translates them into learning objectives ▲ Develops teaching materials and, if needed, assessment tools to match learning objectives ▲ Uses effective teaching strategies ▲ Anticipates and counteracts hidden curriculum in preparation of teaching 	<ul style="list-style-type: none"> ▲ Acts as a resource to other teachers in their development of teaching sessions ▲ Engages colleagues in teaching, and mentors them according to their level of expertise ▲ Fosters the development of a community of practice among teachers through collaborative teaching, reflection, and ongoing mentorship
Facilitates teaching session (During)	<ul style="list-style-type: none"> ▲ Clearly states learning objectives and goals to ensure that they are met ▲ Delivers prepared educational material or moderates sessions to engage learners ▲ Monitors and facilitates interaction and dynamic of the group ▲ Provides a safe learning environment ▲ Participates in assessment of learners 	<ul style="list-style-type: none"> ▲ Adapts teaching to respond to learning needs identified during the session ▲ Integrates own relevant clinical experience and best evidence into teaching ▲ Recognizes student disengagement and adapts teaching techniques appropriately ▲ Addresses learning environment difficulties ▲ Delivers formative assessment 	<ul style="list-style-type: none"> ▲ Provides mentorship to others, either by role modeling or by deliberate instruction to enhance teaching
Reflects on teaching session (After)	<ul style="list-style-type: none"> ▲ Develops plan to improve teaching after the session ▲ Directs learners to resources to meet ongoing learning needs 	<ul style="list-style-type: none"> ▲ Seeks feedback in an ongoing reflective process to improve preparation and facilitation of teaching sessions ▲ Guides and stimulates learners in exploring their interests 	<ul style="list-style-type: none"> ▲ Fosters the development of a community of practice among teachers by role modeling and guiding others in self-assessment of teaching activities ▲ Undertakes scholarly evaluation and dissemination of teaching activities

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Scenario 2: Facilitate teaching session

A month after your talk on smoking cessation, you are approached by your local retirement home to help promote the influenza vaccine to the residents in a question-and-answer session. The organizers want you to make some remarks to open the session, but no formal presentation is necessary.

The next 4 steps will help you during the session.

Step 5. Get to know your audience. Who is your actual audience? Interacting with your audience members is the first step to learning about their attitudes. In order to do this, you can use a poll (eg, “If you have previously gotten the flu shot, please raise your hand”), technology (clickers or an audience response system), or a round-table introduction. This step also serves a couple of other purposes: it is a targeted needs assessment, helping you know your focus when you answer questions, and it is a “hook,” a way to grab your audience members’ attention by making the session relevant to them.

Step 6. Be flexible. What are the learning objectives of the people who show up? This might be referred to as the “teaching pivot,” in which the needs of the audience follow a different track than you had originally anticipated. Your session will be clearer and more focused if you take a moment to state formal learning objectives, and participants will also listen better if they know the objectives. For example, you could say, “From your comments, it seems as if there are 3 learning objectives for today’s question-and-answer session: How effective is the flu vaccine? What are its benefits for you? and What are its possible side effects?”

Step 7. Speak clearly. Whether you are answering questions or delivering a slide show presentation, try to speak in a dynamic and interactive manner at a reasonable speed. Make a conscious effort to slow your pace, because many people have a tendency to talk too fast when speaking in front of a group. If you feel nervous, remember you are the voice of authority; with your training you know more than 99% of the population about health-related matters. It is usually very effective to tell a relevant story to grab your audience’s attention right at the start. If you have slides, try not to read them, but instead try to maintain a conversational feel—make it like telling a story.

Step 8. Answer questions. Welcome questions and comments from the audience. In most cases these will ensure that the pace of your presentation is appropriate for the audience, and will help maintain your audience’s attention. Even if questions are challenging of your content, embrace them, respond to them respectfully, and do not personalize critiques.

Scenario 3: Reflect on teaching session

Now that you have preparing and facilitating teaching sessions under your belt, you are wondering if you are any good as a teacher. Should you pursue this part of a clinician’s career? How can you improve your teaching even if you prefer to devote yourself primarily to clinical work?

After completing a teaching session, the final 4 steps will help you reflect on several aspects of the event.¹⁰

Step 9. How did it go? Use the questions or comments received at the end of your sessions as feedback about your performance. Were there any questions requesting clarification of points you had covered? If so, perhaps your points were not clearly explained. Were the comments demonstrating integration of ideas you had discussed? If so, you were able to stimulate your audience to think beyond the scope of your presentation—congratulations! Also, you might consider how you can build the opportunity for more formal feedback into future teaching opportunities, which will help you gather more diverse opinions.

Step 10. Did the audience’s needs go unmet? Often learners will approach a presenter at the end of a session with specific requests (eg, a medical student might ask to participate in one of your clinics, or a senior citizen might ask about dates of flu vaccine availability). Did this happen in either of your teaching sessions? If so, you might be in the position of needing to identify resources or of directing people to resources. You might also be able to identify additional information that should have been included in your session, to incorporate it the next time.

Step 11. How could I make this better? It is always recommended to reflect on the session immediately afterward. How did you feel at the end of the session? Your gut feeling is very accurate in determining if it went well or not. If you are alone, jot down a few notes for future consideration. If you are with other teachers who were working together at once, hold an immediate debriefing session to gather feedback about the session. Several people might have experienced similar difficulties, or the same challenges, which is extremely useful information for the improvement of future sessions. Focus on the positive. This experience can then become knowledge and skill as you evolve into an increasingly effective teacher.

Step 12. What mentoring can I get? At a convenient time not too long after the session (ideally within a week), take the opportunity to discuss your teaching with a peer or a mentor. Guided reflection, ideally with

someone you trust and who has some teaching experience, will help you start on the cyclical process of quality improvement for your teaching. Use the suggestions in the 3 previous steps to conduct a self-assessment and develop SMART goals⁸ to improve your teaching in the future. You might also consider ways to gather feedback from learners about these changes you have enacted.

Conclusion

Teaching has evolved greatly from the “see one, do one, teach one” ideology with which many of us were trained. We have all been trained clinically in the patient-centred approach; teaching is an extension of this skill to a group, whether it be case-based learning, continuing medical education, or Web-based teaching and learning. In other words, clinical teachers can use skills that they have repeatedly practised with individual patients to take a history from a group (the introduction or needs assessment), to make a diagnosis (explain the learning objectives), and to negotiate a treatment plan (the delivery of information in an interactive format). The 12 steps in this article outline the essentials of a teaching session with a group-centred approach, and those who are interested in developing their skills at a higher level are again referred to the Fundamental Teaching Activities Framework.⁷ 🍁

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Competing interests

None declared

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TEACHING TIPS

- Family physicians are increasingly being called upon to teach in nonclinical settings. However, most clinicians receive no orientation for this task and might decline teaching invitations as a result. This article outlines 12 steps that clinicians can follow to prepare for, facilitate, and reflect on teaching outside the clinical setting.
- Family physicians are trained clinically in the patient-centred approach; teaching is an extension of this skill to a group. Clinicians can use skills that they have repeatedly practised with individual patients and apply them to teaching a group (eg, taking a history is like taking a needs assessment; making a diagnosis is like explaining the learning objectives; and negotiating a treatment plan is like delivering information in an interactive format).

Teaching Moment is a quarterly series in *Canadian Family Physician*, coordinated by the Section of Teachers of the College of Family Physicians of Canada. The focus is on practical topics for all teachers in family medicine, with an emphasis on evidence and best practice. Please send any ideas, requests, or submissions to **Dr Miriam Lacasse**, Teaching Moment Coordinator, at Miriam.Lacasse@fmed.ulaval.ca.