

# Challenging learning situations in medical education

*Innovative and structured tools for assessment, educational diagnosis, and intervention. Part 2: objective examination, assessment, and plan\**

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**M**edical school and residency training are demanding programs. Most learners will complete their training without considerable difficulties. However, up to 1 in 10 learners will experience problems during their programs. During the past 15 years, there has been increased attention devoted to the “resident in difficulty,” with publications on a variety of topics, including classification systems of learners’ difficulties, assessment frameworks, and intervention plans.

We recently published a book summarizing the current literature about learners facing challenges. The results of the literature review were presented in 3 separate chapters: chapter 1 reviewed the symptoms and signs that indicated potential problems; chapter 2 summarized the literature on educational diagnosis and aimed to help teachers expand their “differential” in various challenging learning situations; and chapter 3 reviewed the management of challenging learning situations.<sup>1</sup>

This article presents updated content from chapter 4, which combines the findings of the first 3 chapters to develop innovative, structured educational tools and models to aid supervisors and clinical teachers in the diagnosis and management of learners facing challenges. Part 1 detailed the data-gathering phase.<sup>2</sup> Part 2 discusses objective examination of learners in difficulty, educational diagnosis, and management of challenging learning situations.

## Background

Based on a thorough literature review, we propose an integrated approach to *assessment, educational diagnosis, and management* of challenging learning situations that is derived from the available frameworks but that also adds some specific assessment tools. To provide structure to the assessment of learners facing

\*This article is adapted from *Educational Diagnosis and Management of Challenging Learning Situations in Medical Education*<sup>1</sup> with permission from Université Laval.

<sup>†</sup>The Educational Consultation Note and Educational Management Tool are available at [www.cfp.ca](http://www.cfp.ca). Go to the full text of this article online, then click on **CFPlus** in the menu at the top right-hand side of the page.

challenges, this model is based on the analogy of a medical history and physical examination.

The Educational Consultation Note (available from **CFPlus**<sup>†</sup>) was presented in part 1 of this series,<sup>2</sup> and the data-gathering phase was detailed on the first page. This article will describe how to use the second page of this tool, which is intended to help teachers gather objective data, facilitate analysis, and plan management when challenging learning situations occur.

## Objective examination

In order to conduct a reliable objective examination, it is important to observe learners in various situations and ensure that assessment is congruent with colleagues’ opinions and findings. The employment of a 360-degree evaluation is also potentially beneficial at this step.

The objective examination should be designed to evaluate competencies under the 7 CanMEDs–Family Medicine roles. Various assessment methods are proposed in our tool, which can be categorized under *clinical practice* or *other activities* (teaching, research, or administration).

**Clinical practice.** Clinical practice is the most common and typical context for gathering objective data on a learner’s level of skill. Indirect and direct supervision (or videotaped interviews), chart reviews, comments from staff and patients, examinations, and critical incidents will together provide sufficient data to evaluate most of the competencies that need to be assessed.

**Other activities.** Academic activities such as teaching (observing the resident giving a lecture, teaching a small group of students, or teaching one-on-one), research (evaluation of the resident’s academic project), and administration (analysis of the resident’s participation in committees, service meetings, etc) will also provide data to help assess most of the CanMEDs–Family Medicine competencies.

## Educational and differential diagnoses

*Educational diagnosis* can be defined as the determination or identification of the causes of a learning difficulty (inspired by *Petit lexique en évaluation des apprentissages*<sup>3</sup>). This step requires analysis of the symptoms and signs gathered during the assessment phase to interpret the issues underlying a learner’s situation.

A number of classification models of learners’ problems were reviewed in chapter 2 of our book.<sup>1</sup> To

facilitate educational diagnosis, we have integrated them into a multiaxial diagnostic approach inspired by Boutin et al (M. Boutin, D. Saucier, J. Théorêt, *Pedagogical diagnosis and intervention planning in supervision: a multiaxial framework*; personal communication, 2007).

- Knowledge and skills (axis I)
- Attitude (axis II)
- Learner's personal problems (axis III)
- External stressors (system or teacher) (axis IV)
- Global assessment of functioning and prognosis (axis V)

Although academic difficulties might be principally owing to deficits in knowledge, skills, or attitude, it is important to keep in mind that problematic functioning arising from such deficits might be exacerbated by personal problems or external stressors.

It is essential here to emphasize that even if issues with the environment, the teacher, or the learner's personal life contribute substantially to the educational diagnosis, such issues should not excuse academic difficulties in a learner, as a lack of knowledge, deficiencies in skills, or an inappropriate attitude all require specific attention. Understanding such environmental considerations, however, will shed more light on challenging learning situations and help in designing more appropriate interventions. It is important that faculty identify such external problems, but not use them as an excuse or reason to pass trainees who have not met the learning objectives of the rotation.

## Management

The last component of our approach consists of an algorithm (available from **CFPlus**<sup>†</sup>) for the educational management of challenging learning situations. This tool assumes that an educational assessment has been conducted and that an educational diagnosis (or diagnoses) has (or have) been made.

The algorithm starts with a diagnosed challenging learning situation. The first step is intended to address any underlying features contributing to the problematic situation. This implies taking action to remedy issues present in the learning environment, with the teacher, and in the learner's personal life. Intervention strategies are suggested in the table associated with the algorithm.

The second step encourages a discussion between faculty and the learner to identify learning needs and set measurable learning objectives in order to work on academic or professional issues. In the third step, educational strategies and resources are implemented over a reasonable timeline. A number of possible strategies and resources are listed in the table that follows the algorithm.

Monitoring the educational intervention and providing regular feedback and evaluation are essential. If the difficulty is resolved to a satisfactory degree through the educational process, ongoing follow-up needs to be ensured. If there are persisting concerns, a formal remediation process might be the next step. Finally, if the difficulties

cannot be addressed and resolved, despite all adequate efforts that have been devoted to resolving the challenging learning situation, faculty might have to decide whether the learner should be dismissed from the program.

## Conclusion

We propose an integrated assessment, diagnosis, and management model based on the reviewed publications. Educational diagnosis and management skills for challenging learning situations are not inborn. Most teachers require some degree of training owing to the complexity and diversity of challenges that learners present. Many faculty development offices have created workshops for this purpose,<sup>4-7</sup> and the tools presented here will provide another resource to assist teachers in educational diagnosis and management of challenging learning situations. 🌿

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### Competing interests

None declared

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### TEACHING TIPS

- An objective examination should evaluate competencies in the 7 CanMEDS–Family Medicine roles by gathering data from the resident's clinical practice and other activities (eg, teaching, research, and administration).
- In an educational diagnosis, signs and symptoms gathered during the initial assessment phase must be analyzed to determine the issues underlying the resident's challenges. However, underlying issues should not excuse academic difficulties in a learner, as a lack of knowledge, deficiencies in skills, or an inappropriate attitude all require specific attention.
- Providing regular feedback and evaluation during the management process is essential. However, if the difficulties cannot be addressed and resolved, faculty might have to decide whether the learner should be dismissed from the program.

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