Excellence in Paramedic Education

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Exploring the idea of competence and excellence in paramedic education is timely as stakeholders in Canadian EMS work with the Paramedic Association of Canada (PAC) to redevelop the National Occupational Competency Profile for Paramedics in Canada (NOCP). Education programs can serve many goals fostering consistent performance, contributing to efficient and effective patient care, laying a foundation for future growth in the discipline, and encouraging personal growth in paramedic learners. Each of these goals implies a different view of competence and excellence. The concept of competence in health education is often studied as the development of expertise.

Donald Schön is an educational theorist who is best known for promoting reflective practice and professional expertise. Schön (1983) contrasts two views of excellence and competence. The first is based on what Schön calls Technical Rationality and involves the use of analytic strategies and algorithms to solve known types of problems. But, he claims, professional practitioners work in a dynamic environment that is far less predictable than the ability to distinguish and choose between potentially conflicting options for performing specific procedures. Novices learn context-independent rules (e.g. indications and contraindications) for performing specific procedures. Advanced beginners recognize salient features of different types of common situations and develop customized management plans from various potential options. Over time, proficient performers intuitively recognize situations as similar to various prior examples. They discriminate between potentially conflicting interpretations of the situation (e.g. develop a differential diagnosis) and develop plans that are not opposing views of excellence. Rather, they merely focus on different types of learning and different stages in the development of expertise. When learners are mastering rule-based competencies (e.g., procedural skills such fracture management, initiating intravenous lines or implementing protocols), then technical competence, with its focus on consistency and observable behaviours is an

In the context of paramedicine these two approaches are often framed as technical competence and clinical competence. Technical competence can be defined as consistent, independent (un-coached), timely, accurate, and appropriate performance as outlined by an external authority and assessed through observable behaviours. This view is embedded in the current NOCP and PAC definition of competence. Clinical competence, by contrast, can be thought of as the ability of paramedics to apply, adapt, and integrate procedures appropriate view of competence. Competencies that require discernment and the ability to distinguish and choose between a variety of acceptable options (e.g., interpersonal and interprofessional communications or applying guidelines to unique situations) are more indicative of developing clinical competence. Excellence at the level of expert performance involves the paramedic’s ability to become aware of and make use of increasingly nuanced contextual clues from the environment.

A paramedic’s journey from novice to expert stretches over his or her career and encompasses both formal education and personal reflection. Writers such as Schön and Dreyfus give us ideas and language that help us better understand the implications of differing definitions and strategies within the dynamic, unpredictable environment of field practice. Clinical competence emerges over time as paramedics encounter and reflect on their experiences and build a foundation of professional expertise.

Excellence for the technically competent practitioner involves the acquisition of a large, unique body of specialized knowledge and the application of standardized principles and guidelines (Schön, 1983). Excellence in clinical expertise, however, is indicated by an increasing awareness of the context of practice and the ability to choose between a number of potentially acceptable options for problems that are difficult to categorize. Schön poses these views as opposing conceptions and the difference between them as a gap that should be better addressed by professional education programs.

Other theorists, however, see these differing views of competence as simply different ways of knowing in different situations. Hubert and Stuart Dreyfus (1986) developed a model of skill acquisition that is commonly cited in nursing and medical education. The model outlines five stages: novice, advanced beginner, competent performer, proficient performer, and finally, expertise. Novices learn context-independent rules (e.g. indications and contraindications) for performing specific procedures. Advanced beginners recognize situational aspects of calls and develop principles for dealing with them. With experience, competent performers recognize salient features of different types of common situations and develop customized management plans from various potential options. Over time, proficient performers intuitively recognize situations as similar to various prior examples. They discriminate between potentially conflicting interpretations of the situation (e.g. develop a differential diagnosis) and develop plans that are not opposing views of excellence. Rather, they merely focus on different types of learning and different stages in the development of expertise. When learners are mastering rule-based competencies (e.g., procedural skills such fracture management, initiating intravenous lines or implementing protocols), then technical competence, with its focus on consistency and observable behaviours is an

In contrast to the pursuit of consistency which characterizes technical competence, clinical expertise is situational, adaptive, and intuitive. Indeed, a technically competent practitioner would be considered an advanced beginner in the Dreyfus (2001) scheme, while clinical competence develops with time and experience.

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References
