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PROFESSIONALISM

From learning activities to the meaning of life: Fostering professionalism in Canadian paramedic education

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Abstract

This article explores the development of professionalism in paramedic programs of the Justice Institute of British Columbia (JIBC), Canada. Professionalism is currently defined as a set of competencies that are embedded as a set of skills and knowledge to be mastered, then applied in simulations and a field practicum. In the second part of the article, professionalism is examined as a broader concept and suggestions are presented for fostering the development of professionalism in the current redevelopment of the JIBC's Advanced Care Paramedic program.

Keywords: *competencies; curriculum; EMS; paramedic education; professionalism*

The article explores professionalism in the context of paramedic education in British Columbia, Canada. The first section examines current approaches to teaching professionalism competencies in the Justice Institute of British Columbia (JIBC)'s Primary Care Paramedic curriculum. A broader definition of professionalism and its development is then presented. The article concludes with a discussion on how the JIBC will foster the development of professionalism through the current revision of the Advanced Care Paramedic program.

Context for the Discussion

In the Canadian context, professionalism is defined as a set of competencies or observable behaviours that are identified in a national competency profile. These competencies are embedded as a set of skills and knowledge to be mastered then applied in increasingly complex patient encounters before being assessed in a field practicum. The final assessment in the practicum involves a preceptor observing and documenting at least two instances of the student exhibiting the observable behaviours specified in the national competency profile.

Health care in Canada, including paramedic practice, is in the jurisdiction of the provinces. Each province has, over time, developed its own unique set of standards, scope of practice, and forms of regulation to meet local and regional needs. In 2001, the Paramedic Association of Canada released a National Occupational Competency Profile (NOCP) for Paramedics in Canada¹. The NOCP established a common framework and terminology for standardization of paramedic programs across the country. The NOCP specified competencies for four levels of practitioner: Emergency Medical Responders (EMR), Primary Care Paramedics (PCP), Advanced Care Paramedics (ACP) and Critical Care Paramedics (CCP). While each province has retained its own standards and scope of practice, many adopted the NOCP as the basis of their licensure levels. In addition, the NOCP has helped to bring many non-patient care topics, such as professionalism, into the formal paramedic curriculum.

The first of the NOCP's seven competency areas covers "Professionalism Responsibilities." This section specifies seven general competencies, which, in turn, contain sub-competencies and associated

criteria which must be demonstrated by paramedic students (Table 1). Moreover, the NOCP identifies specific “performance domains” in which practitioners must demonstrate each competency. For example, EMRs must “acknowledge patient privacy” and “demonstrate empathy” in a *simulation* setting, while PCP, ACP, and CCP practitioners are required to demonstrate these competencies in the *practicum* environment. Thus, the NOCP provides a list of professionalism-related content “bits” and evaluation requirements that must be incorporated within a paramedic curriculum.

Table 1: Sample Professionalism Competencies from Canadian National Occupational Competency Profile

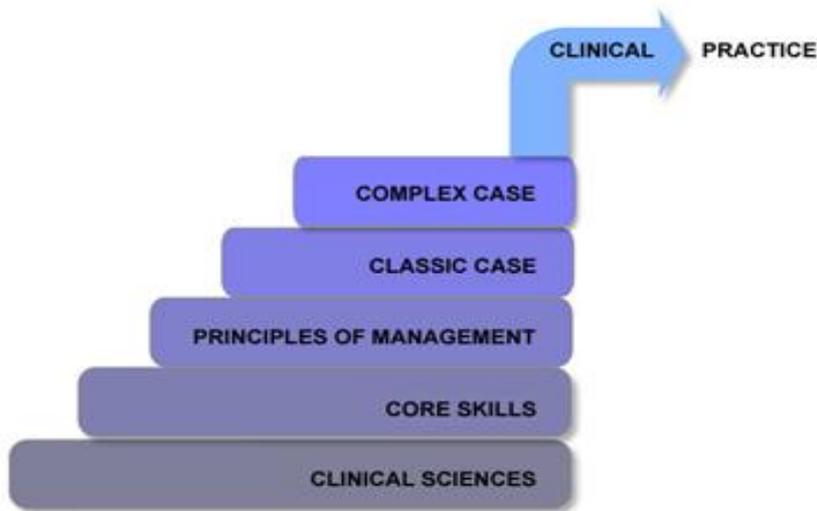
Competency Area 1				
GENERAL COMPETENCY 1.1 Function as a professional.				
GENERAL COMPETENCY 1.2 Participate in continuing education.				
GENERAL COMPETENCY 1.3 Possess an understanding of the medicolegal aspects of the profession.				
GENERAL COMPETENCY 1.4 Recognize and comply with relevant provincial and federal legislation.				
GENERAL COMPETENCY 1.5 Function effectively in a team environment.				
GENERAL COMPETENCY 1.6 Make decisions effectively.				
Expansion of General Competence 1.1				
SPECIFIC COMPETENCY				
1.1.a Maintain patient dignity.				
1.1.b Reflect professionalism through use of appropriate language.				
1.1.c Dress appropriately and maintain personal hygiene.				
1.1.d Maintain appropriate personal interaction with patients.				
1.1.e Maintain patient confidentiality.				
1.1.f Participate in quality assurance and enhancement programs.				
1.1.g Utilize community support agencies as appropriate.				
1.1.h Promote awareness of emergency medical system and profession.				
1.1.i Participate in professional association.				
Expansion of Specific Competency 1.1.a				
Practice Level:	EMR	PCP	ACP	CCP
Performance Domain:	Simulation	Practicum	Practicum	Practicum
1.1.a Maintain patient dignity.	Define "dignity".	Discuss "dignity".	Discuss "dignity".	Discuss "dignity".
		Identify cultural characteristics that impact patient dignity.	Identify cultural characteristics that impact patient dignity.	Identify cultural characteristics that impact patient dignity.
	Acknowledge cultural differences.	Acknowledge cultural differences.	Acknowledge cultural differences.	Acknowledge cultural differences.
	Acknowledge personal privacy.	Acknowledge personal privacy.	Acknowledge personal privacy.	Acknowledge personal privacy.
	Demonstrate empathy.	Demonstrate empathy.	Demonstrate empathy.	Demonstrate empathy.
	Demonstrate care appropriate to situation.	Integrate care appropriate to situation.	Integrate care appropriate to situation.	Integrate care appropriate to situation.
	Demonstrate care appropriate to the needs of special populations.	Adapt care appropriate to the needs of special populations.	Adapt care appropriate to the needs of special populations.	Adapt care appropriate to the needs of special populations.

Source: Adapted from the Paramedic Association of Canada’s *National Occupational Competency Profile for Paramedics in Canada*.¹

The JIBC conducted a comprehensive task analysis of paramedic practice in the late 1990s. The analysis broke medical and trauma calls into approximately 18 call types and over 200 specific injuries and conditions. Further analysis of the assessment, decision-making, and management of these conditions led to a comprehensive list of knowledge, skills, judgment, and attitude “bits” that constituted paramedic practice. The JIBC’ simple-to-complex curriculum model emerged from this

process (Figure 1). In this model, learners establish a foundation of generally held concepts and principles (e.g. anatomy, physiology, and pathophysiology), then master the core skills and procedures of prehospital care (e.g. airway management, drug administration). Next, learners integrate their skills and knowledge to manage classic presentations of common injuries and conditions. In complex cases, learners adapt to meet the unique challenges presented by special situations (e.g. patients with multiple conditions) or special populations (such as the elderly). Finally, learners move to the field setting where they begin the journey of developing their own personal style of practice.

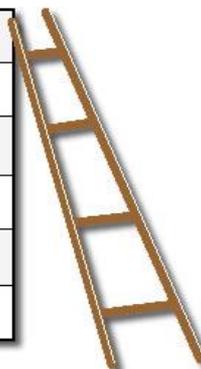
Figure 1: Justice Institute of British Columbia Paramedic Curriculum Model



A parallel process analyzed paramedic practice from a functional perspective. Ambulance calls consist of several components (e.g. Patient Assessment, History Taking). These components incorporate procedures which, in turn, are comprised of simpler procedural chains and individual skills. The pedagogic reconstruction of these “performance” elements moves from simple to complex – from mastery of basic skills and simple procedural chains to their application in exemplar situations (classic presentations of common conditions), and adaptation through increasingly complex scenarios (Figure 2). Each type of learning activity focuses on a different aspect of performing an ambulance call and lends itself to a particular type of learning goal. In essence, learners move up a “Practice Ladder” that rests alongside the curriculum model (Figure 3).

Figure 2: JIBC Practice Ladder

Practicum	Experience	Proficiency
Clinical	Exposure	Recognition/ Application
Immersive	Problem-solving	Adaptation
Simulation	Differential Diagnosis	Integration
Drills/OSCE	Procedures	Sequencing
Skill Stations	Skills	Mastery



JIBC Practice Ladder

Figure 3: JIBC Curriculum Model and Practice Ladder



Both the NOCP and the JIBC curriculum are based on a classic instructional design process. Thus, embedding professionalism competencies in a paramedic curriculum becomes a relatively straightforward task of identifying which curricular components each competency is best covered in. The Practice Ladder is used to target each learning outcome (competency) with an appropriate practice learning activity (e.g. case study, role play, drill, simulation). Professionalism “criteria” from the NOCP become checklist elements in formal assessment tools.

In the JIBC’s PCP curriculum, most professionalism competencies are studied early in the program. These competencies are further reinforced in subsequent simulations and the practicum. This ensures that essential competencies are mastered and applied in a variety of contexts and become part of the graduates’ overall practice. Demonstration of competence consists of consistent, independent, timely, accurate performance in accordance with established standards and protocols.²

The Challenges of a Competency-based Approach

But is professionalism simply a set of competencies to be mastered?

A competency-based approach is grounded in a particular, albeit tried and tested, paradigm of learning that focuses on building technical competence as evidenced by a learner’s observable performance against a pre-determined external standard. The goal is to develop consistent performance by all practitioners in all situations.

Yet, a closer examination of the professionalism “competencies” reveals that professionalism does not necessarily seek consistent, context-free performance. Rather, several professionalism outcomes and competencies refer to adaptation, modification, and the exercise of judgment to meet unique needs of specific patients. They imply a sense of adaptability and prudence to meet the requirements of a particular situation rather than the application of a common principle in any situation.

How Do We Get Good at What We Do?

The classic medical education framework, which sits under Canadian approaches to paramedic education, calls on staged models of learning. In the 1980’s Benner³ described the nurse’s journey from novice to expert. Her work called on Dreyfus and Dreyfus⁴ who posed that the development of expertise follows a fairly predictable pattern. Learners initially master concepts in a context-independent fashion, and then apply them through the use of concrete rules and principles. As they move from “advanced beginners” to “competent performers” they employ analytic problem solving strategies. Proficiency and expertise, however, require both practice and experience. While learners in

the initial stages use analytic devices to reduce the complexity of problems, more experienced learners develop a repertoire of experiential knowledge that become short cuts used to generate spontaneous solutions to common problems. Expertise, in the Dreyfus and Dreyfus model, involves an intuitive, holistic approach which calls upon both analytic and experiential knowledge.

What is particularly intriguing in this model is the assertion that proficiency and expertise are based on adaptation and holistic judgment. Expertise, in this model, is not the consistent application of rules of principles (mastery of competencies) in a context-independent fashion. That, in Dreyfus' view, is the mark of a competent practitioner. Rather, expertise involves the development of judgment and the ability to react to the specifics of *the situation at hand*.

And this seems to speak to the challenge faced by a competency-based approach to professionalism. Perhaps professionalism is about more than competency – perhaps, in Dreyfus and Dreyfus' terms, professionalism involves the development of expertise.

So, what, then, is Professionalism?

Cruess, Johnson, & Cruess⁵ examined changing concepts of professionalism in medical education and identified several defining characteristics:

- Mastery of a complex body of knowledge and skill
- Service and accountability to those served
- A code of ethics, with a commitment to “competence, integrity and morality, altruism, and the promotion of public good”^{5, p.75}
- Autonomy of practice and self-regulation

Based on these criteria, Canadian EMS is maturing, but does not meet the requirements for professional status. Canadian EMS is not yet self-regulating. Paramedicine in many Canadian jurisdictions is licensed by an external provincial regulating body, its scope of practice is established by legislation and defined by regulation, and its members are more likely to belong to a union than a professional association. At a national level, there is no common scope of practice, no code of ethics, no mandated entry-to-practice examination or registry.

However, Canadian paramedics are making progress on several fronts. Several national organizations represent operators⁶ and educators,⁷ and an umbrella organization for practitioners has membership from over half the provinces.⁸ There are ongoing discussions on the development of a national certification examination. As noted above, the NOCP, while not a national scope of practice, provides a description of paramedic practice in Canada. In addition to the NOCP, there are at least two textbooks that explicitly address EMS in the Canadian context.^{9,10}

Professionalism requires far more than ensuring that individual practitioners cover competencies and demonstrate observable behaviours. Fostering professionalism, as defined by Cruess, Johnson, & Cruess⁵ calls for a broader approach.

Learning Activities and the Meaning of Life

I have had several spirited discussions over the years with a colleague in our Centre for Conflict Resolution. One of our ongoing debates is whether conflict resolution is a set of skills that we should embed in our curriculum (competencies) or an overarching philosophy that should guide ethical behaviour. I have been known to assert that conflict resolution is not the “meaning of life” and lean more towards the skills-based position. However, in the context of professionalism, I am tempted to argue differently.

Traditional instructional systems design is often portrayed as a circular model that, as noted above,

seeks to match learning activities to desired outcomes. The process, however, is often mute on how achieve this match. It is assumed that the structure of the learning objectives and the choice of verb will imply an appropriate teaching and learning strategy. In practice, curriculum designers make several important choices in between specifying the verb and outlining the learning activity.

Curriculum development occurs on several levels or layers. For the sake of this article, I will pose that design strategies can include:

- broad-based approaches to curriculum development;
- organizing paradigms for entire programs including curriculum structure;
- concepts for putting together lessons on specific topics using learning strategies; and
- individual learning activities that focus on specific learning outcomes or objectives.

The following section will examine how professionalism, conceived as more than a set of competencies, might be effectively embedded at several levels of a curriculum.

Professionalism as Competencies and the Meaning of Life

The JIBC is currently re-imagining and rebuilding its Advanced Care Paramedic (ACP) program. The program is set within the School's overall vision of a potential career path for paramedics. The mission of the JIBC's School of Health Sciences is to advance the role of paramedicine in an evolving health care system. Part of that vision involves gaining recognition of paramedicine as a health discipline. To that end, the JIBC is increasingly engaged in interdisciplinary initiatives with other health education bodies and health authorities. The JIBC has articulated an overall blueprint for paramedic education that includes both a technical and academic stream. Primary Care Paramedics may take additional academic foundation and health science courses to complete a two-year Diploma in Health Sciences with a focus on EMS. Graduates of the diploma and the Advanced Care Paramedic program will receive a three-year advanced diploma. Post-graduate studies will focus on Critical Care paramedicine, community-based paramedic practice and other specializations. The goal is to advance paramedicine as a profession by developing an integrated set of programs and academic credentials that build a solid foundation for practitioners and allows future growth in clinical practice or towards leadership positions.

At the program level, professionalism is explicitly recognized as one of the five central themes of the new ACP program. The other themes include health and wellness, interprofessional practice, paramedic practice, and clinical (field) practice. These will serve as the central integrative concepts for each course in the program.

Professionalism is embedded in both in the strategies and learning activities of each course. Developing the content for these lessons is essentially an exercise in sifting and sorting. The NOCP lists specific competencies related to professionalism. Similarly, the BC Academic Health Council has developed a set of interprofessional practice competencies. Other sources of content include program texts, lessons and modules from previous programs, instructors, and content experts. All of these components are metaphorically thrown into a blender, then sorted into topics and sifted into an integrated form for study and practice.

An additional layer of strategies link these individual learning activities to the central themes of the program. The JIBC curriculum structure moves from simple to complex, but is also iterative and integrative. Many of the essential professionalism competencies are covered in specific modules, then revisited and reinforced in subsequent lessons and practice activities. Learners repeatedly encounter these competencies as they progress from mastering core skills in drills to their application in

increasingly complex patient presentations through simulation. The professionalism competencies are encountered, enacted, and assessed through knowledge evaluations, checklist criteria, specific role plays and simulations, as elements of other simulations, and as practicum evaluation elements.

In addition, the ACP program includes the concept of “planned serendipity.” Professionalism and interprofessional dilemmas and issues are embedded throughout the curriculum. For example, a simulation that focuses on the management of paediatric asthma in the respiratory disorders course may involve a child who has evidence of physical abuse. The subsequent debrief focuses on the assessment and management of the underlying condition. But the simulation also allows for “aha!”s and learning moments that review, reinforce, and integrate broader issues.

The program reaches beyond its boundaries by planting seeds of service and lifelong learning. The program encourages learners to explore both formal and informal roles of paramedics within their communities and the health care system at large. Learners study principles of adult learning and are given opportunities to act as peer tutors to their colleagues and mentors to junior cohorts. They are encouraged to seek roles as preceptors and educators in their future practice.

A final strategy capitalizes on the informal socialization by which new practitioners are brought into a discipline’s ways of thinking and acting. Instructors and preceptors serve as models for their students through their everyday language and behaviour. This is a powerful form of learning that is often left untouched. We can tap into this strategy by surfacing our intentions with both our instructors and our learners and working towards consensus on the need to foster professionalism within our practice.

Summary

In this article, professionalism is presented as more than a series of competencies – more than a set of outward behaviours. Certainly, professionalism includes these competencies, and traditional methods of teaching and learning are effective ways of developing those behaviours. But professionalism extends past patient care and beyond initial education to foster a particular mindset and approach to one’s work. Efforts to foster professionalism must similarly extend past individual learning activities and observations to include broader learning strategies, the acceptance of professionalism as a core organizing element of a curriculum, and an integrative goal throughout a practitioner’s career.

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