

## **The Clinical/Practicum Experience in Professional Preparation: Preliminary findings**

### **L'expérience clinique/pratique dans la préparation professionnelle : résultats préliminaires**

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#### Résumé de l'article

Les auteurs résument les résultats préliminaires d'une étude interdisciplinaire portant sur la phase clinique/de stage de la formation préalable des enseignants de premier cycle dans les professions. Une analyse préliminaire des données a permis d'établir des similitudes et des différences d'une discipline à l'autre pour ce qui est des facteurs suivants : (a) la terminologie décrivant chaque programme de stage; (b) les principales caractéristiques des programmes; (c) les forces et les faiblesses de chacun; (d) la façon dont chaque stagiaire est mentoré et évalué; et (e) les futures innovations dans cette phase d'apprentissage expérimental de la préparation professionnelle.

# THE CLINICAL/PRACTICUM EXPERIENCE IN PROFESSIONAL PREPARATION: PRELIMINARY FINDINGS

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**ABSTRACT.** The authors synthesize preliminary findings from an interdisciplinary study of the practicum/clinical phase of undergraduate pre-service education in the professions. Early data analysis identified similarities and differences across disciplines in terms of: (a) the terminology describing each practicum program, (b) the programs' key characteristics, (c) their respective strengths and weaknesses, (c) the way practicum students are mentored and evaluated, and (d) future innovations in this *experiential learning* phase of professional preparation.

L'EXPÉRIENCE CLINIQUE/PRACTIQUE DANS LA PRÉPARATION PROFESSIONNELLE :  
RÉSULTATS PRÉLIMINAIRES

**RÉSUMÉ.** Les auteurs résumant les résultats préliminaires d'une étude interdisciplinaire portant sur la phase clinique/de stage de la formation préalable des enseignants de premier cycle dans les professions. Une analyse préliminaire des données a permis d'établir des similitudes et des différences d'une discipline à l'autre pour ce qui est des facteurs suivants : (a) la terminologie décrivant chaque programme de stage; (b) les principales caractéristiques des programmes; (c) les forces et les faiblesses de chacun; (d) la façon dont chaque stagiaire est mentoré et évalué; et (e) les futures innovations dans cette phase d'apprentissage expérimental de la préparation professionnelle.

**T**he purpose of this paper is to synthesize early findings from an interdisciplinary three-year study that we are conducting on the role of the clinical/practical phase of pre-service preparation of students. We are investigating a variety of professional disciplines at several medical/doctoral universities across Canada.

There has been a related type of study initiated by the Carnegie Foundation for the Advancement of Teaching (2006), which has given oversight of a large-scale project called the *Preparation for the Professions Program (PPP)*. The PPP is presently investigating the undergraduate education of six types of professionals (clergy, engineers, lawyers, nurses, physicians, and K-12

teachers). Two of these Carnegie reports have already been published, one for clergy education (Foster, Dahill, Golemon, & Wang Tolentino, 2005) and another for lawyer education (Sullivan, Colby, Welch Wegner, Bond, & Shulman, 2007).

In the light of these efforts and other research examining practical learning in professional education (Ehrich, Hansford, & Tennent, 2004; Neville, Sherman, & Cohen, 2005), we assert that educators across the professional disciplines need to engage in conversations about their pre-service educational programs in order to learn from one another. To add to this professional conversation, we have embarked on a Canadian study of the *practical learning* component of undergraduate education for the professions. In this present article, we review some related literature; we outline the methodology used for our study; we present themes that have emerged from the preliminary data analysis; and we describe promising innovations that have been introduced in various practicum programs.

## BACKGROUND TO THE STUDY

There is a growing universal demand for well-prepared professionals in all disciplines (Cross, Israelit, Cross, & Israelit, 2000). Society delegates to the professional schools the task of preparing its physicians, lawyers, engineers, teachers, and social workers (Goodlad, 1984); moreover, the responsibility of these practitioners has acquired an increased sense of importance and urgency in recent years (World Health Organization, 2006). Increased pressure has consequently been placed on educational institutions to prepare the required number of qualified professionals to fulfill society's needs for the services that practicing professionals provide.

The practical or clinical portion of the preparatory program has long been a key component of professional undergraduate education. Rooted historically in the early apprenticeship approach for preparing craftspersons in the guild systems of Europe (Wonacott, 2000), the practical phase of pre-service education continues to be critical in preparing prospective practitioners to enter their respective professions (Neville et al., 2005; Shulman, 1998).

Novice practitioners regularly report that the practicum experiences have been critical in preparing them for their first position in their respective professions (Ehrlich & Greenberg, 2002). The importance of the practical/clinical component, together with a growing global shortage of professionals in a variety of fields, require that professional education institutions seriously explore how they can optimally operate the practicum components of their programs.

The foundational premise upon which all of these practice-based programs are based is that authentic and deep learning occur when students apply

relevant knowledge and skills to solving real-life problems encountered by actual practitioners in the field (Renzulli, Gentry, & Reis, 2004). Historically, the experiential learning components of most professional programs allowed students to spend a period of time in an actual practice-setting under the joint mentorship/supervision of a practicing professional and a university or college advisor (Kolb, 1984; Ehrich, Hansford, & Tennent, 2004; Rose & Best, 2005). This practicum-triad collaborates to assist the novice to learn to integrate theory and practice and to become socialized into the profession (Baird, 2002; Brett, 2006; Ralph, 1998).

## METHODOLOGY

We are engaged in a multi-disciplinary investigation of the clinical or practicum phase of professional education in the professions of Dentistry, Education, Engineering, Forestry, Law, Medicine, Nursing, Veterinary Medicine, Pharmacy, Social Work, and Theology. We selected these 11 professions because of their significance to the majority of Canadians and their families, and their prominence in everyday Canadian society. At this point in the project, we have studied the practicum/clinical programs offered by 45 departments offering undergraduate degrees in these professions located at nine Canadian universities. We have gathered data by means of a series of document analyses, site-visits, individual and focus-group interviews, and print surveys (Ralph, Walker, & Wimmer, 2006). We summarize this phase of our data-collection process in Table 1.

We visited nine medical/doctoral universities, analyzed the pertinent documents from 45 departments, conducted 35 individual and 21 focus-group interviews with administrative personnel from these programs, and solicited hand-written or online survey responses from post-practicum students in three faculties (Education, Engineering, and Nursing).

Adopting a qualitative inquiry approach (McMillan & Schumacher, 2005), we used a mixed methodology of inductive analysis and simple descriptive statistics to collate the accumulating interview and survey data. We created five preliminary patterns or interim categories suitable for ongoing analysis, comparison, synthesis, and interpretation of further data as the study continues (Gay, Mills, & Airasian, 2005).

We have gathered and analyzed a considerable amount of data that we summarize below. However, we believe (as suggested by the information shown in Table 1) that collecting additional data from other disciplines, using focus-group interviews and print surveys, may be warranted in order to balance the information that we have already gathered from the sources indicated.

TABLE 1. Summary of the data-collection process for the first part of the study

Discipline <sup>1</sup>	Den	Edu	Egr	For	Law	Med	Nur	VM	Pha	SW	Theo
Method Sites visited	2	7	4	3	5	5	7	1	5	3	3
Document Analysis	y	y	y	y	y	y	y	y	y	y	y
Individual Interviews <sup>3</sup>	1	9	2	3	3	3	6	-	3	3	2
Focus-groups (administrators)	1	2	4	-	3	3	2	1	2	1	2
Focus-groups (students)	-	1	1	-	-	-	-	-	-	-	-
Print Surveys <sup>4</sup>	-	N=431	-	-	-	-	-	-	-	-	-
Online Surveys <sup>5</sup>	-	-	N=33	-	-	-	N=63	-	-	-	-

<sup>1</sup> The abbreviations represent, respectively: Dentistry, Education, Engineering, Forestry, Law, Medicine, Nursing, Veterinary Medicine, Pharmacy, Social Work, and Theology.

<sup>2</sup> “y” represents “yes”. Documents were available online or in hard copy.

<sup>3</sup> The individual interviews referred to here were with program directors, coordinators, or faculty-based administrators.

<sup>4</sup> These surveys were administered to post-interns in classroom face-to-face settings, after they returned to the campus following their extended-practicum. Return rates were high: 97% and above.

<sup>5</sup> These electronic surveys were sent to post-practicum students after they returned to campus. Return rates were lower: 52% for Engineering and 30% for Nursing.

## EARLY FINDINGS

Three of our preliminary observations (Ralph, Walker, & Wimmer, 2006; Ralph, Wimmer, & Walker, 2007) were that: (a) *all* of the practicum programs we examined share the same aim (i.e., to mentor undergraduate students as they acquire and/or develop their respective professional skills and knowledge in real-life settings), (b) *all* of these programs also have certain elements in common (e.g., a mentorship/supervisory process, and formative and summative evaluation procedures); and (c) the programs *all* have idiosyncratic features that are unique to the situational contexts in which each practicum experience is embedded.

We structured the preliminary data analysis using five analytical categories that reflected our five basic research questions, which we also employed to design the core interview and survey questions. These five general themes were: the terminology used to describe the practicum program; the key features that characterized the program; the positive attributes of the practicum; its negative aspects; and promising program innovations. We summarize these themes below.

### *Terminology used by the disciplines*

All of the practicum/clinical programs offered an experiential learning component that incorporated various principles espoused by such instructional methodologies as “Active Learning” (Prince, 2004); “Problem-Based Learning” (Woods, 1995); “Cooperative Education” (Linn, Howard, & Miller, 2004); “Apprenticeship” (Wonacott, 2000); or “Service Learning” (Keckes, 2006). The practical programs we studied had a variety of names. For instance, some faculties and departments in the Health Sciences used such terms as: *Preceptorship* (in Nursing); *Clerkship* (in Medicine); *Structured Practical Experience Program* (in Pharmacy), or *Clinical Education* and *Simulation Clinic* (in Dentistry).

Faculties of Education used such terms as: *Internship*, *Extended Practicum*, *Field Experiences*, or *Student Teaching*; Sociology departments used terms like *Field Instruction* or *Field Practicum*; and Law faculties offered *Moot Court* experiences and pre-articling courses with such titles as: *Clinical Administrative Law*, *Clinical Litigation Practice*, or *Clinical Criminal Law*. Other terms that designated the practicum component were: *Cooperative Education Programs* (in Engineering and Forestry); *Field Schools* or *Intensive Field Courses* (in Forestry); *Field Education* (in Theology); and *Internship* (in Engineering and Theology).

### *Unique program features*

Although each discipline organized the practicum component in unique ways, these programs were *all* designed with the same goal. It was to provide students with increasingly greater professional responsibilities in their respective practice environments as they progressed through the years of their undergraduate preparation.

For instance, all professional education institutions have established specific graduation and certification requirements that prospective professionals must meet in order for them to enter the field and engage in their own professional practice. These regulations have strict standards, codes, and guidelines set by federal or provincial governments and/or by the professional associations themselves. Some professions require that graduates meet certain “program-exit” criteria before being licensed (e.g., students in the Health Sciences must pass National examinations before being certified), while other disciplines have prescribed particular “program-process” objectives that must be achieved (e.g., faculties of Social Work have National Accreditation Standards requiring students to complete 700 hours of supervised social work experience in community social service agencies or organizations).

Professional schools require their students to pass mandatory clinical courses or practicum/field experiences. The prospective practitioners in these field placements pay course fees and receive no remuneration as they engage in the

learning tasks. Moreover, they are typically mentored in the workplace setting by supervisory personnel representing both the students' academic faculty and professionals who work at the practice site. These supervisors provide the learners with ongoing feedback and guidance as the latter are gradually given increased professional responsibilities as the practicum unfolds.

Some professional education programs in Engineering, Forestry, and Law offer their students three types of practicum or clinical experiences, one of which is a set of compulsory credit-courses that are of a practical or clinical nature. A second alternative is the voluntary *Cooperative Education* program, in which students are paid a salary for their work in a professional firm, usually over a period from 4 to 12 months in length, and for which they consequently extend the length of their undergraduate program due to this paid work experience.

A third practicum option for Law and Engineering students is one that requires them to engage in a period of professional practice *after* they receive their Bachelor degree, and before they receive their professional certification. Thus, Law graduates must successfully complete an *Articling* experience, in which they earn a salary working in a Law firm for a specified period, prior to being granted authorization to practice law by the Law Society of the province in which they reside. Likewise, Engineering graduates must first be successfully employed for a specified period of time in the engineering field before being granted professional status by their province's professional engineering association.

The length of the compulsory practicum/clinical component varies across disciplines, and often for institutions within the same discipline. For instance, students in the MD programs we examined were continuously engaged in Clinical Skills Education for five consecutive terms of their four-year program. Then in Term 2 of their third year they began their 48- to 52-week *Clinical Clerkships*, in which they completed *Rotations* in the major medical departments of a health care institution.

By contrast, the length of practicum experiences for teacher candidates in faculties of Education varied across programs. For example, one faculty required a three-week student teaching placement in a school at the end of the third year of the four-year B.Ed. program, to be followed by a 16-week extended-practicum in another school in Term 1 of the fourth year. By contrast, another Education faculty offered teacher candidates an option of doing a 10-month *Internship* in a school.

*Supervision and evaluation of students.* All of the practicum programs that we investigated had clear policies, procedures, regulations, expectations, and guidelines regarding supervisory practice and evaluation of student performance during the practicum /clinical experiences. This documenta-

tion was available to all participants either in hard copy, or online on the faculty web-site, or both.

None of the programs (except one in Nursing) identified a particular supervision or mentorship model that they followed, but virtually all of them operated in accordance with the general principles of *Clinical Supervision*, an approach to educational supervision developed by Cogan (1973) and Goldhammer (1969), and later refined by others (Anderson, 1986; Glatthorn, 1997; Sergiovanni & Starratt, 2006). In essence, this Clinical Supervision approach reflected a developmental, socialization process, in which a more experienced practitioner mentored a neophyte to learn/refine the required professional knowledge, skills, and attitudes (Rose & Best, 2005).

The mentoring process, which was evident in all of the practicum programs we studied, consisted of the person(s) in the supervisory role working closely with the person(s) in the learning role: (a) to set practice goals; (b) to provide observation of the learner as he/she engaged in practice, (c) to coach the protégé as he/she sought to develop professional competence; and (d) to provide ongoing (formative) feedback and formal (summative) evaluation on the learner's professional performance.

Typically, the supervisory process was a shared effort, in which a faculty-based agent collaborated with the site-based practitioner(s) to support the supervisee to acquire the essential skills. All of the supervisory initiatives that we investigated also attempted to engage the learners in a collaborative and reflective self-assessment process – whereby the neophytes were encouraged to gather and use evidence from multiple sources (i.e., site-based mentors, faculty instructors, peers, clients, and previous research) in their quest to become competent practitioners.

Likewise, in all of the practicum programs investigated, the evaluation process for assessing student performance and growth was well defined, and all necessary procedures and documents – for both the mid-term (formative) and the final (summative) assessments of students' competence – were clearly identified. Again, in all cases, provision for students' input in their evaluation process was evident; and university policies also provided for formal appeal procedures for students if they were dissatisfied with the evaluatory procedures and/or results.

### *Positive aspects of the practicum*

Every department we studied identified positive aspects of their practicum or clinical programs. Decision makers typically determined these strengths by analyzing the feedback they received regarding the daily operation of these programs from several sources, which included: professional credentialing/licensing/accrediting bodies; employers of program graduates; field-based instructional and supervisory personnel, faculty-based instructors and men-



tors, program administrators, and to a lesser extent, the students. Because students are at the center of all aspects of the practicum, we felt that their voice was not as valued in some quarters as it could have been.

*For students.* Because we believed, with Clift and Brady (2005) and Schrantz (1993), that the views of students may often be downplayed, unwittingly or in some cases deliberately, by educational administrators in the decision-making process for program renewal, we solicited the perspectives of post-practicum students from three professional faculties (Education, Engineering, and Nursing) regarding the positive and negative aspects of their internship experiences. These groups of respondents who completed our survey provided one or more comments on what they found to be the most positive and negative aspects of their practical/clinical experiences.

Our preliminary findings showed that students' views of the positive aspects fell into two general themes. The first category described the supportive relationships the practicum students experienced among five sub-groups of individuals with whom they worked: (a) the entire staff of their placement location, who welcomed and accepted them as colleagues; (b) their immediate site-based supervisor(s) who helped them grow professionally; (c) their faculty-based supervisor(s) who mentored them; (d) the individuals (pupils/clients/patients) they served; and (e) their fellow students placed in the same or neighboring locations.

A second positive theme included respondents' comments about their successful accomplishments related to specific professional or technical achievements. Sub-categories in this theme were: (a) being able to close the proverbial theory-practice gap by engaging in real-life application of their knowledge; (b) developing their own professional style; (c) successfully completing the required tasks assigned to them; and (d) participating as accepted team-players in the professional group .

*For the practicum site.* Our preliminary data also corroborated earlier studies (Ralph, 1998, 2005) in which supervisory personnel reported that: (a) they appreciated being able to contribute to the professional growth of "the next generation" of practitioners (thus perhaps satisfying an altruistic or beneficent motive); (b) they viewed the mentoring experience as partially meeting their own need for professional development and lifelong learning; and (c) they welcomed the "youthful idealism" and fresh insights that many of the students brought to the workplace.

*For the faculty/department.* Practicum administrators and instructors in several of the disciplines, who were required to visit the practicum sites to mentor/monitor student development, reported that they valued their relationship with practitioners in the field because they were able to gain immediate knowledge of current and upcoming issues, trends, and perspectives from the "real world." Moreover, faculty-members acknowledged that maintain-

ing a collegial relationship with their field-based colleagues often resulted in the faculty being perceived as more approachable and credible – and less as “insulated in their ivory tower.”

*For the co-operative education programs.* In addition to the benefits described above, participants in Cooperative Education programs, typically in the four-month summer work terms (e.g., in certain Engineering, Law, and Forestry departments), identified distinct advantages of these Co-op options. For example, Co-op students were able to acquire relevant, paid work experience, while making possible job contacts for the future. Faculty reported that returning Co-op students also exhibited higher levels of knowledge and motivation in subsequent courses, which positively influenced their non-Co-op classmates.

The employers at the field-sites valued the contribution of Co-op students, who provided needed short-term service for peak periods over the busy summer months. Other advantages for employers were that they were able to “screen” potential job prospects for future employability, and that they had more immediate access to supervising faculty, thereby increasing the opportunity for professional collaboration and knowledge-sharing between the field and the university.

Faculties benefited from the Co-op programs because of their positive impact on both students and employers. Again the credibility of the faculties who organized these experiences appeared to be enhanced.

### *Negative aspects of the practicum*

Although they highly rated the clinical/practicum phase of professional education, students and instructors/administrators, alike, also identified weaknesses that needed addressing. For instance, the same students from the three faculties, who described the positive aspects cited above, also identified several negative elements, which we categorized into three general themes.

One negative theme was related either to personal challenges, or to professional difficulties, or to both. The personal frustrations that some students recounted were financial problems, travel difficulties, and feelings of isolation – often because of having to re-locate to rural/remote locations for their practicum. The professional difficulties included heavy workloads, time-management difficulties, or feeling ill-prepared for the responsibilities.

A second negative category documented by post-practicum students was related to interpersonal difficulties encountered at the placement site, such as conflict with the immediate supervisor(s), or students’ feelings of being demeaned or not being accepted as professionals by the staff. A third category reflected students’ views that certain university and faculty practicum policies/procedures were problematic. Concerns in this category were often related to program and organizational inequities (e.g., the practicum placement proce-

dures being inequitable, the supervisory personnel not selected and/or prepared adequately, or the mentorship and evaluation process being insufficient).

Many practicum administrators from a variety of the disciplines also identified some of these negative points. For instance, they reported that some site-based practitioners become fatigued with the increasing pressures to perform not only their own regular professional duties, but to meet the added expectations connected with supervisory responsibilities. In fact, many practitioners have declined to engage in mentoring students because they perceive it as an overload situation, without any incentive or appropriate reward. Such conditions have multiplied the difficulties of recruiting, preparing, *and* retaining an adequate number of interested supervisors in certain clinical/practicum programs. In some regions in Canada, there is also a serious shortage of placement-locations in which students can complete their clinical practice.

A further problem articulated by some practicum leaders was the reluctance among some students to be placed in rural or remote locations for their field experiences. These students expressed concerns about: (a) the extra expense incurred for travel and accommodation at the practicum site; (b) the accompanying personal and family disruption, and (c) "having to pay course tuition for these frustrations on top of it all."

Some program administrators/coordinators also reported that their practicum administrative staffing-complement was under-resourced. They did not have sufficient funding to hire needed clerical, secretarial, and technical help for adequately organizing and operating the clinical program. They consequently encountered further slowdowns and inefficiencies in recruiting/orienting/training new mentors, and in providing appropriate and consistent professional development/in-service opportunities for experienced supervisory personnel.

Another difficulty mentioned by some practicum organizers was the fact that, although many faculty members and department administrators professed that they valued the important contribution of the clinical/practicum component to the success of the entire undergraduate pre-service program, their endorsement was not matched by specific policies or tangible actions. It was felt that some faculty members and senior administrators, who had not actually been involved in this practical phase, were not as supportive as they could be. As a consequence, some participants felt that there was not sufficient political will among senior policy-making bodies at the universities to modify existing reward structures in university collective agreements to accommodate personnel involved in clinical/practicum work. These changes were deemed necessary in order to recognize and reward individuals for their work in clinical education to the same extent that conventional research and scholarly publications are rewarded.

*Promising innovations for consideration*

To this point in our three-year study, we have found that some practicum administrators are considering, or have begun to implement, unique modifications to their programs in order to reduce the negative elements and/or to enhance the strengths in their various clinical/practicum offerings. One of our purposes for presenting these innovative strategies is to inform other practicum administrators as they consider ways to enhance their own clinical/practical programs.

One recommendation was that policy-makers, decision-leaders, and program organizers should actively seek (and then incorporate) the ideas of students, both past and present, in their practicum reform/renewal plans, because students experience all facets of the program. Some of our interviewees observed, moreover, that a few clinical/practicum administrators seemed to display somewhat of an arrogant attitude by intimating that they alone, as formal leaders in the organization, were capable of making such program decisions, and that students' voices and views were somehow less important in the process.

Other practicum organizers – particularly those involved with paid Cooperative Education programs and internships – were unanimous in their desire to lobby universities, governments, educational organizations, and the corporate world to increase their moral and financial support in order to expand such Co-op programs so that all students in these faculties could participate in these popular initiatives.

A specific program initiative that has proven successful is the SPEP (Structured Practical Experience Program) implemented by faculties of Pharmacy across Canada. In SPEP, all supervisory and evaluation policies, procedures, and guidelines are standardized across Pharmacy faculties. Preceptors are selected and oriented according to specific guidelines, and program leaders regularly solicit formal student feedback from *all* participants about their experiences in the clerkship. This student feedback is welcomed and used to make continual adjustments to improve the field program.

Some professional faculties are exploring plans to establish interdisciplinary degree programs (e.g., the University of Victoria's consideration to offer joint degrees, such as a BSc/BEEd in Mathematics, a BEng/BEEd in Engineering, or an ESL/BEEd, or FSL/BEEd, in Second Language Teaching). Such innovations would allow students to acquire their practical experiences in multiple but related settings.

An innovative program, developed in British Columbia by a collaborative forum of multi-stakeholder organizations from the health-care and post-secondary sectors, is addressing the problem of the shortage of practicum placements in the province. This initiative, the *Inter-professional Rural*

*Program of BC (IRPbc)*, the first of its kind in Canada, places teams of practicum students from a range of health-care professional programs into smaller communities across the province. During these practicum periods, students experience the rewards and challenges of engaging in rural practice in their respective fields, with the added benefit of having a cohort of peers to provide mutual support and with whom to co-develop interdisciplinary knowledge.

Other benefits of IRPbc have been identified: (a) for rural health authorities, by helping them recruit and retain future health-care employees from among the practicum students; (b) for the professional schools, by increasing the number of practicum placement locations; (c) for the rural medical facilities, by providing them with additional staff to help deliver health care, and in enhancing their staff members' learning opportunities because of their mentoring of the prospective graduates; and (d) for rural communities, by attracting prospective professionals to move to and take up employment in their regions after graduation.

Moreover, in a strategy to assist students in their community practice, some Medical faculties provided their third-year clerkship students with a monthly stipend (\$400) to help offset the expenses they incurred during their clinical rotations. Some rural school divisions offered similar incentives to attract teacher-interns to do their extended-practicum in their schools, and perhaps to interest them in returning to teach there after graduation.

Some teacher education faculties have also implemented changes to their practicum format, in order to counter the feelings of isolation or abandonment reported by some interns doing their practicum in rural areas. The solution was to place cohorts of several students into a single school, whose staff, as a whole, would serve as a mentoring body to guide the interns in their professional growth.

Furthermore, to address the problem of having insufficient practicum locations, some health-care faculties in Nursing and Medicine have made use of campus-based, "high tech" computer-assisted models and/or simulated experiences and programs. By introducing such efforts, practicum coordinators have relieved pressure from consuming valuable resources/time at the clinical sites for basic training, but instead have reserved the sites for providing students with actual health-care practice with real clients.

In addition, some professional faculties are currently incorporating more media/technology/distance education components within their practicum programs, in order to permit students and their faculty mentors to engage in certain facets of the supervisory process online (e.g., basic communication, completion/submission of forms) – provided that opportunity is given for some face-to-face interaction among participants.

Some professional schools (e.g., Engineering, Pharmacy, Nursing, and Medicine) use their national, professional code of standards to serve as a regulator of faculty and student responsibility, with respect to expected mentor and protégé conduct and performance. They found that these guidelines provided continuity and uniformity in practicum program expectations across Canada.

In order to deal with the challenge of practitioners being reluctant to take on supervisory responsibilities in the practicum, some departments and faculties have enacted specific strategies to provide their employees with incentives and support for undertaking this role. Such initiatives include: (a) granting the mentors educational credit for participating in the form of subsidized course tuition, free university library access privileges, opportunity to join an association of faculty mentors (and benefit from the resulting camaraderie and peer support); (b) being eligible to be nominated by their students for formal mentorship awards; (c) receiving free registration for professional development workshops/seminars; and (d) being invited to banquets and ceremonies that formally acknowledge and honor their professional contributions to the clinical/practicum programs. Faculties who have implemented such incentives reported that participants have appreciated receiving the recognition, and that the “spirit of camaraderie” among the members has indeed risen.

In order to counteract the difficulty of supervisory personnel not being properly trained/prepared in their mentorship skills, we suggest that practicum leaders who do not have a supervisory model to guide their mentorship process could consider adopting the *Contextual Supervision* (CS) model. CS was developed and refined over the past two decades by one member of our research team (Ralph, 1991, 1998, 2002, 2005). The CS approach has been shown to have potential in assisting mentors, if trained in its application, to enhance their mentoring effectiveness.

#### CONCLUDING COMMENTS

As our research team completes the final portion of the study on the role of the experiential learning component of professional pre-service preparation, we wish to re-emphasize three key points that have emerged in our preliminary research. One element is that the work of professionals is of critical importance in today’s global community. Therefore, we as one interested group of researchers are ethically and morally obligated to share whatever results we find regarding the practicum/clinical phase of professional education across disciplines. We are hopeful that our findings will be of benefit to professionals in training, to their educators, to practicing professionals in the field, to professional associations and agencies, and to society at large – locally, nationally, internationally.

Of course it would be naïve or arrogant, or both, for us to consider that any single study, alone, could accomplish that goal. However, this fact leads to our second concluding point. This principle is that teacher scholars involved in the education of professionals in the 21<sup>st</sup> century will have to increase their multidisciplinary collaboration in order to meet the growing demand for well trained practitioners, universally (Canadian Council on Learning, 2006; Carnegie, 2006). For disciplines to share insights with one another regarding innovative teaching/learning practices, would in our view not diminish their effectiveness, individually, but would synergistically promote the common good – for all professions.

Our final point is an invitation to educational practitioners and researchers in the professions, who have aspirations to create innovative practicum experiences, to join like-minded colleagues in collaborative efforts to achieve that objective – which we believe could ultimately benefit society at large (Robaire, 2006).

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