

The practical or clinical program has long been a key component of professional undergraduate education in such

of a complex, collaborative arrangement among four participating stakeholders: (a) personnel in the institution of higher education who organize/administer the professional degree program; (b) practitioners at the practicum-site who mentor students as they engage in real-life practice; (c) the professional organization that grants and regulates the certification/licensing process after students complete the pre-service program; and (d) the students, themselves, who in the final analysis, are the major recipients of, and the *raison d'être* for, the existence of the practicum (Brett, 2006; Linn, Howard, & Miller, 2004).

Positive and Negative Aspects of the Practicum: Post-Interns' Views

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Abstract

This article forms one part of an interdisciplinary, pan-Canadian research project examining the future of the practicum in undergraduate professional preparation. For the present part of the study, the authors examined the views of 226 teacher candidates concerning their 16-week extended practicum (internship) experience by means of a brief printed questionnaire. Respondents described the most positive and the most negative aspects of their practicum, and this article summarizes the findings from these responses.

The data analysis yielded three positive themes. One theme dealt with the supportive relationships that the teacher candidates developed with various participants in the practicum setting. The second category reflected respondents' perceptions of their successful teaching accomplishments and professional achievements; while the third theme addressed the teacher candidates' feelings of self-efficacy in being able to positively affect the students under their care.

By contrast, four broad themes reflected the post-interns' responses regarding the negative elements of their practicum experiences: (a) individual personal/professional challenges, (b) site-based interpersonal concerns, (c) university-related policy/procedural problems, and (d) practicum-office difficulties.

Implications are discussed both for the practicum leaders of the program in which these students were enrolled, and for those practicum administrators in other institutions. The authors assert that leaders must develop and/or modify program policies, procedures, and practices not only to maintain/enhance the positive aspects identified in this study, but to reduce the negative ones.

diverse disciplines as the Health Sciences, Engineering, Law, Education, Social Work, Forestry, Architecture, and Theology (Carnegie, 2006). 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 a critical phase in the preparation of prospective practitioners to enter their respective professions (Shulman, 1987, 1998).

In today's professional education programs, students begin to apply the theoretical knowledge and skills they learned in their campus-based courses, by being guided through a series of graduated steps within real situations and authentic settings as part of the clinical or practicum portion of their training (Riehl, 2006; Rose & Best, 2005). This process of "transferring theory to practice" is generally conducted under the tutelage of experienced mentors in the clinical/practicum situation, who facilitate their protégés' learning and reflection, and who provide supervisory feedback as these novices apply their emerging professional skills in real-life settings (Lortie, 1975; Schaff-Blass, Rozier, Chattopadhyay, Quinonez, & Vann, 2006).

Typically, in all of the professions, this practical component is offered by means

If one reviews the considerable body of research literature pertaining to any of the professional disciplines, one realizes that this research primarily deals with the respective subject-matter content in each field. However, during the past twenty-five years, there has been an increase in the amount of research related to pedagogical matters in each of these fields. This growing attention to the teaching/learning process in professional education has been evident by a corresponding expansion in several related areas, such as: an increase in the number of new professional-education associations that have appeared during that time period; the heightened number of educational conferences and seminars organized within the disciplines, and a growth in the publication of books and journals devoted exclusively to the pedagogical dimension of each field.

Moreover, a review of the pedagogical research literature that focuses specifically on the practicum/clinical aspect of pre-service education reveals that

educators in the professions are recognizing the importance of enhancing this practical element (Carnegie, 2006; Clift & Brady, 2005; Goodlad, 1984). However, the number of such studies--particularly those highlighting the voice of students-- is small, compared to the volume of research related to other pedagogical topics in each field. In order to address this relative paucity of research investigating the place of practical learning within pre-service undergraduate education, we, the three authors of this paper, sought and received a grant from the Social Sciences and Humanities Research Council of Canada (SSHRC) to conduct a three-year interdisciplinary investigation of the experiential learning phase of professional training across Canada. The title of our project is *Future directions in clinical/practicum experiences: A multi-disciplinary study*.

Although the voice of students often appears to be disregarded by policy-makers and program administrators (Clift & Brady, 2005), we believed that post-practicum students would provide us with a key source of evidence about the operation of the practicum program. We thus agreed with Schrantz (1993), who asserted that educators should not only acknowledge students' personal observations about a program in which they are involved, but that program administrators would in fact be remiss, if they disregarded students' perspectives of the strengths and weaknesses of the program (Gall, Gall, & Borg, 2006).

We also concurred with Angelo (2004) and Ory (2001) that students are the only individuals who have direct, daily, and intimate involvement with all aspects of the teaching/learning situation. Therefore, our purpose for this present article was to examine the views of one group of post-practicum students at a faculty of Teacher Education regarding their views of the positive and negative features of their recently-completed practicum.

Background to the Study

The clinical or practicum phase of professional preparation is grounded in the pedagogical research, theories, and philosophies described and espoused by contemporary adult educators and educational psychologists (Merriam, Caffarella, & Baumgartner, 2006; Ormrod, 2007). The body of research regarding the practical learning process draws on the various theories and principles from several related fields, such as: *cognitive developmental psychology* (Piaget, 1963); the *active learning* process (Bonwell & Eison, 1991; Prince, 2004); *adult education* (Knowles, Holton, & Swanson, 2005); *social constructivist* ways of knowing (Cole, 1996; Vygotsky, 1978); *experiential learning* (Kolb, 1984); *cooperative/collaborative learning* (Johnson, Johnson & Smith, 1998); *problem-based learning* (Woods, 1994); *pragmatic*

experience/thinking (Bruner, 1990; Dewey, 1938); *situated learning* (Lave & Wenger, 1991); and *professional self-reflection* (Schon, 1987).

Essentially, the practicum or clinical phase of undergraduate professional education in all disciplines places prospective professionals, under the joint tutelage of field-based practitioners and faculty-based advisors, within actual settings in which the profession is practiced. This practical component has a variety of names across disciplines (Ralph, Wimmer, & Walker, 2007); however, it is in this experiential learning phase, over an extended period (often of several weeks duration), that the protégés receive both formative and summative feedback from their mentors, as the former develop and refine their professional knowledge, skills, and dispositions in real-world environments.

This practical learning process is developmental in that the students engage in progressively more sophisticated tasks in dealing with actual clients/patients/pupils in actual practice. The ultimate goal of this practicum phase of professional education, according to Shulman (1998), is for the supervisors to provide beginning practitioners with *more* than sound theory and practitioner skills. He suggested:

...what they have to learn is judgment.

Judgment is essentially that set of processes of reasoning, of intuiting, of deciding, of discerning that one undertakes, in the presence of novel combinations of uncertain elements, where one must make a best estimate or decision about what to do next...

[W]here in our professional preparation programs are we addressing these attributes of what it means to be a professional? Where are the sense of service and moral responsibility...the capacity for judgment? (pp. 14-15)

Students from all disciplines typically rank this *hands-on component* as the most valuable learning experience in all their undergraduate education (Goodlad, 1984; Linn, Howard, & Miller, 2004; Lortie, 1975).

Previous Research Highlighting Positive Features of the Practicum

The literature related to professional education refers repeatedly to the high rating that prospective practitioners give to their respective practicum/clinical programs. The following citations illustrate this point. For instance, under the auspices of the Carnegie Foundation, Silva and Sheppard (2001) identified positive features of incorporating innovative programming in Engineering undergraduate education—such as the expansion of hands-on learning curricula, student-centered learning, and cooperative education opportunities

Another recent Carnegie project was related to the education of Clergy (Foster, Dahill, Golemon, & Wang Tolentino, 2005). The report on this project indicated that three-fourths of Clergy alumni/a stated that their practicum learning/internship experiences were the most valuable part of their professional formation. Furthermore, with respect to the Medical field, Rose and Best (2005) recently compiled a comprehensive body of research-evidence from a variety of experts in the Health Sciences, which demonstrated the importance of the clinical aspect of professional preparation in that sector.

In the field of Teacher Education, studies conducted more than 30 years ago (Lortie, 1975) concerning teacher candidates' views of their student teaching experiences reported similar findings. In that research, beginning teachers ranked their field practica ahead of all other Education coursework, in terms of usefulness and preparation for the reality of school life. A more recent study of nearly 500 student teachers in Asia revealed congruent findings (Smith & Lev-Ari, 2005).

Several other studies cited below confirmed these positive features of the practicum experience:

- The practicum provided a real-life setting for aspiring practitioners to apply their academic knowledge and thereby reduce the proverbial *theory-practice gap* (Atkinson, 2004; Capa & Loadman, 2004).
- It provided a venue for students to practice and solidify their fundamental professional knowledge, skills, understanding, competence, disposition, and attitudes (MacGillivray & Freppon, 2000; Woullard & Coats, 2004).
- It provided an environment whereby prospective professionals could grow in their self-efficacy and their personal confidence and professional identity (Leland & Harste, 2005; White Watson, 2004).
- The collaboration and support provided by field-based practicum supervisors/mentors was critical in assisting novices in their early professional development (Brett, 2006; Smith, Frey, & Tollefson, 2003).
- Previous research examining post-practicum students' views of their internship experiences was conducted at the same university at which we conducted the present study (Ralph, 1994, 1994-1995). That earlier research revealed that post-interns identified similar strengths to those reported by participants in this latest study.

Previous Research Highlighting Negative Aspects of the Practicum

It is important to note that even though the majority of respondents in all of these above-mentioned studies highly valued the practicum, they also identified specific problems in it and in other facets of their

undergraduate preparation program. In a recent synthesis of over one hundred Teacher Education studies conducted under the auspices of the American Education Research Association, Cochran-Smith and Zeichner (2005) reached similar conclusions. They, too, identified the presence of both positive and negative aspects of teacher preparation programs.

Even though students highly rank the practical phase of their pre-service programs (Ehrlich & Greenberg, 2002), there have been persistent weaknesses cited in the research literature (Clift & Brady, 2005; Hughes, 2004; Lortie, 1975). One weakness was that, traditionally, practice-based/clinical programs have been conducted in isolation and often independently within each discipline. However, recent global events and current societal pressures are requiring professional schools to explore innovative ways to collaborate in creating new means of providing this pre-service practical preparation for their novice practitioners (Kecskes, 2006, Linn, Howard, & Miller, 2004). Professionals need to serve the needs of their constituents in collaborative and creative ways. It is obvious that neophyte professionals must be educated to resolve collaboratively the serious problems that are arising worldwide – in fields of health care, education, business, labor, economics, politics, international relations, agriculture, and the environment (Lougheed, 2007; Pappone, 2007; Senge, Scharmer, Jaworski, & Flowers, 2004).

A second weakness identified in practicum/clinical programs has been that the state of these practical components was often characterized as fragmented and incoherent, not only cross-departmentally at single universities, but also between and among universities. One group of educators has called for more relevant comparative and widely-disseminated research that is grounded in field-based practice, in order to inform decision-makers as they seek to enhance pre-service programs of professional development (Ralph, 1996; Statistics Canada, 2002).

Of course this fact does not mean that all practicum programs must be made to fit an identical mold. In reality, the specific paradigms, purposes, and structures characterizing each discipline are unique, as well they should be. However, an exploration of the many excellent types of practical learning experiences that already exist across disciplines is warranted. We believe that such an investigation may provide much needed information for organizers and researchers to consider as they seek to re-formulate their educational offerings to better equip their graduates to face the challenges and opportunities emerging universally in the twenty-first century (Alcaly, 2003; Kelly, 1999).

A third weakness identified in the literature has been the chronic theory-practice gap between the university-based coursework and the daily routines of

professional practice in the field (Beck & Kosnik, 2002; Rogman & Hopp, 1999). This gap was often accentuated by a lack of involvement in many practicum programs by full-time faculty members (Waddell, 1999), or by a shortage of field-based practitioners who were adequately trained to share in the delivery of the practicum (Wolfensperger Bashford, 2002).

Thirteen years ago, when Ralph (1994, 1994-1995) investigated post-practicum students' views of the internship experience at the same university in which the present study was conducted, he found that teacher candidates identified the same strengths and weaknesses that were identified in the current program. In terms of weaknesses, the major complaints identified by the earlier study included: (a) a theory/practice discrepancy between what interns learned on campus and what they experienced in the daily routines of school; (b) a questioning by interns of perceived inequities in the policies/practices in the office of field experiences, regarding such processes as practicum placement procedures; (c) a lack of clear and consistent communication among all participating sub-groups (i.e., the university, the school districts, and the teacher-candidates); and (d) a perceived unfairness in the treatment of the interns by their supervisors (e.g., inconsistent evaluation criteria of interns' progress among supervisors; or incompatibility between some supervisors and their proteges).

Often this compromised university-field partnership has been shown to be further eroded by a fourth limitation revealed by research in certain practicum programs. This weakness was the existence of competing roles, duties, and interests of both the faculty and the field-based mentors (Abdal-Haqq, 1998; Ward & Saylor, 2002). Campus-based and/or field-based participants were often simply unable to sustain the expected level of commitment and support for the practical/clinical program over time (Ralph, Wimmer, & Walker, 2007). As a result, students enrolled in these programs sometimes became dissatisfied and frustrated with their learning experiences within them (Kosnik & Beck, 2003; Larson, 2005).

A fifth challenge appearing in some clinical programs was that there were vestiges of ill-conceived and hastily implemented reform initiatives that had not been properly initiated and/or maintained (Bullough & Kauchak, 1997). A sixth, but related limitation of some practicum programs was a pervasive problem of inadequate communication and collaboration that seemed to persist among the various participating stakeholders with connections to, or interests in, the experiential learning experiences (Silva & Sheppard, 2001; Zeichner, 1996). There was occasionally lacking a clear conceptualization of a systematic

teaching-learning framework into which to integrate the practicum, the prior coursework, and the neophytes' first position in his/her professional career (Solomon Cohen & Milone-Nuzzo, 2001).

A seventh difficulty that hindered the improvement of some practicum/clinical programs was the apparent reluctance of some program administrators to consider "the voice of the student" in the process of program change. We were in full agreement with Gall, Gall, and Borg (2006) and Clift and Brady (2005) in censoring the practice of some educational program leaders, in which they seemed to ignore or dismiss the views of students about the conditions existing in the practicum. Rather, we maintain that the students are ideally situated to observe and experience *all* the intricacies of a program's operation throughout its duration (Angelo, 2004; Ory, 2001). We therefore conducted the present study to welcome and value the students' voice, as we pursued our goal of exploring the present state of, and future innovation in, the entire realm of clinical education (Ralph, Wimmer, & Walker, 2007).

An eighth persistent weakness that appeared to arise in the delivery of many experiential-based programs was the lack of a clear supervisory model to guide the whole mentorship process (Goodlad, 1994; Hughes, 2004; Ralph, Wimmer, & Walker, 2007). Some mentoring relationships, interactions, expectations, and results seemed disorganized, unsystematic, and ineffective. However, one supervisory model that one member of our research-team has developed and refined, and that does appear to have potential to improve this situation, is *Contextual Supervision* (CS, Ralph, 1993, 1998, 2004, 2005). The CS model has been used in a variety of practicum settings, and has been shown to add clarity and direction to the process of assisting neophyte practitioners to develop their professional knowledge and skills (Ralph, 1993, 2005). We believe that the promise of the CS model warrants further research on its implementation in a variety of pre-service clinical education environments (see Posner, 2004).

A ninth difficulty--and perhaps the most serious one--was the relative lack of comprehensive research examining these practicum programs across disciplines (Canadian Council of Learning, 2006; Carnegie, 2006). In our view, educators need to work collaboratively to compare, contrast, and study these professional programs in a variety of fields, and to explore what future best practices might look like from a more holistic and global perspective (Jones & Ewing, 2002; Ralph & Konchak, 1996). This goal forms a key purpose of our interdisciplinary study: we want to help fill this research void, and thereby to contribute to informing professional schools in Canada and elsewhere as they seek to create innovations for the practicum component of professional education.

Methodology

In conducting this portion of our pan-Canadian study on the future of the practicum/clinical component of professional pre-service education, we were in accord with Clift and Brady's (2005) assertion that the voice of students needs to be heard in educational reform research. We believe that students' views *must* be considered in any effort toward practicum innovation. A key reason for this stance is that, in the final analysis, students are the most qualified persons to render judgment on how effectively the program structure and processes meet their unique learning needs and interests en route to their professional certification. In our view, for educators to exclude students' ideas and suggestions would, at best, be disrespectful, and at worst, be arrogant by intimating that they, alone, were capable of making program decisions.

In 2006, we solicited written responses to two brief questions from 234 teacher candidates, who had recently completed their 16-week extended practicum (internship) in K-12 schools in a Western Canadian province. The respondents had returned to the campus of a Faculty of Education at one Western Canadian University to complete their final semester of coursework toward their Bachelor of Education degrees.

There was a 96.6% return rate for the survey, and the respondents were representative of the total undergraduate student population at the Faculty, in terms of gender, age, subject major/minor, elementary/middle years/secondary grade teaching-level, urban/rural placement, and Aboriginal/non-Aboriginal program stream. The two questions on the print survey were: *What for you was the most positive aspect of the internship experience?* and *What for you was the most negative aspect of the internship experience?*

We collated and categorized the post-interns' written responses to these questions into emerging patterns and themes, using the constant comparison technique of analytic induction (Gay, Mills, & Airasian, 2005; Glaser & Strauss, 1967). In this process, we continuously examined and re-examined the data, searching for regularities and common patterns, and placed the comments into evolving categories (McMillan & Schumacher, 2005).

Findings Regarding the Positive Aspects

We summarize the data categories for the positive aspects in Table 1, and we also provide sample comments to illustrate teacher candidates' views. Of course, consideration of these results may be useful for the administrators in the respondents' own institution, but we also believe that administrators and faculty in other institutions, who are interested in examining the

present and the future state of their own practicum/clinical offerings, would gain insights from these findings.

Overall, the responses to this survey were consistent with research results describing prospective professionals' positive view of their experiential learning experiences cited earlier in this paper. This perspective was and still is that students, across all disciplines, typically rank the practicum/clinical component as the most valuable part of their professional education. It provides them the opportunity to apply their previous learning to real situations in the field (Cochran-Smith & Zeichner, 2005; Goodlad, 1984; Riehl, 2006). Nearly all respondents in our survey commented on the support they received from various participants involved in the practicum program.

As indicated in Table 1, many teacher candidates identified two or more supportive individuals, with approximately 40% of the respondents signifying that the entire school staff made them feel welcome (e.g., "It was a very warm and encouraging school and staff; everyone was always willing to support and assist me"). Nearly one-third of the teacher candidates specified that their classroom cooperating teachers had the most positive influence on them during the internship (e.g., "It was having a co-op who was kind, considerate, and allowed me to teach in my own style").

Table 1. Teacher-Candidates' Views of the Positive Aspects of Their Extended-Practicum Experiences (n=226)

Category	Percent of Respondents
1. Supportive Relationships	
School staff	39
Cooperating teachers	31
College supervisors	5
Parents	4
Fellow interns	2
2. Successful Teaching Tasks	
Putting theory into practice	27
Achieving (or Confirming) teaching style	21
Completing the full-time teaching segment	9
Co-planning/Co-leading extracurricular activities	6
3. Positive Interaction with Pupils	
Facilitating pupil learning	29
Celebrating pupil accomplishments	7

Note. Nearly all respondents reported two or more positive aspects; hence, the values reflect these multiple responses and thus total more than 100%.

Considerably fewer respondents identified the support received from other practicum participants, such as (a) their college-based supervisors (e.g., “Great feedback from my faculty supervisor, lots of shared ideas and support; able to express my own ideas and my new things to try out”); (b) the parents of their students (e.g., “I had very helpful and supportive parents and an excellent community”); and (c) their fellow teacher-candidates (e.g., “I had two classmates placed in the same facility. We vented on each other and we were all there for one another! They pulled me through!”).

A second major category of positive experiences identified by the respondents was related to the theme of the teacher candidates’ professional-task accomplishments or successful teaching achievements (see Table 1). Nearly one-third of the cohort indicated that the most positive aspect of the practicum was the opportunity for them to narrow the proverbial theory/practice gap, by engaging in real teaching/learning activities with students in authentic classroom interactions. Comments illustrating their views on the sub-theme of this teaching-technique aspect were: “The most positive was being able to try in a safe environment all of the methods and styles of teaching I’ve been learning for the past four years,” “I learned things I could never learn in a university classroom, such as how to interact with parents, and how to accommodate kids’ different learning abilities, etc.” and “Learning how teachers do their job and not having worry about theories from university; seeing the practical and hands on applied to teaching”.

A second sub-category in this technical-task area that was identified by one-fifth of the respondents reflected the satisfaction they gained in affirming their personal teaching capability. Examples of comments related to this aspect were: “I was able to find my teaching style. I was given the opportunity by my co-op to teach the way I was comfortable with, and not simply to mimic her,” “She let me try out my various lessons and units,” and “I got the opportunity to take on the responsibilities of a teacher that really allowed me to see if the profession was for me, and how I am as a teacher”.

A third sub-theme in the professional achievement category that was identified by approximately 10% of the respondents referred to the successful completion of their mandatory full-time teaching segment (i.e., a minimum three-week period occurring in the last half of the four-month practicum, in which interns are required to accept—with reduced but appropriate supervision—the complete role and responsibilities of the regular load of a teacher in the school setting). Illustrative comments identifying this task as the most positive experience were: “It was being with the kids and having control of the classroom during full-time

teaching,” and “It provided an experience where I could be myself, learn, make mistakes and learn from them, and confirm to myself that I’m in the right profession”.

A final sub-theme in the professional practice category that six percent of interns rated positively was the opportunity to co-plan and co-direct extracurricular activities (e.g., coaching a volleyball team) that were over and above their regular teaching duties. Responses related to this sub-topic were: “I got involved in all aspects of the school and rural community” and “Being involved in other aspects of school—outside of the classroom, such as the Winter Festival Concert, the Band Concert, the Ski Trips, and the school dances”.

The third positive category that we identified from the responses was the opportunity teacher candidates had to engage in meaningful interaction with their students. Nearly one-third of the prospective teachers commented on their experiences of enhancing student learning, as illustrated by the following comments: “Working with the kids and developing a teacher-student relationship with them. When I go back to visit, my students are still excited to see me, and I am excited to see them,” “It was positive to work with students. The media has portrayed youth extremely negatively; therefore, I had relatively low expectations of kids, but I was pleasantly surprised,” “It was positive to see the difference I made for a girl who was suicidal and depressed,” and “I found out at the end of my full-time teaching how much the kids had learned from me. That was very rewarding”.

A final sub-category of this third theme related to impacting students, which was identified by seven percent of the respondents, was the interns’ recognition of their students’ achievements. For example one post-intern reported “It was satisfying seeing the excitement of students as they learned to play an instrument and how proud they were of their accomplishments,” another intern similarly shared, “It was seeing the joy in students’ eyes when they were successful in some of aspect of the educational experiences,” and a third respondent wrote “I loved the school atmosphere and watching the students succeed and smile and get excited”.

Findings Regarding the Negative Aspects

With respect to the experiences that the teacher candidates found negative, we summarize the data categories in Table 2, and we also provide sample comments to illustrate their views. The responses reflected the post-interns’ concerns in four major categories. Ninety-two percent of the respondents identified various challenges they faced regarding their personal situations and instructional performance during the practicum; 74% of the respondents

identified interpersonal difficulties they encountered at the practicum site; 67% of them cited problems they attributed to faculty policies/procedures; and 42% of the teacher candidates mentioned concerns they related directly to the practicum field office.

Table 2. Teacher-Candidates' Views of the Negative Aspects of Their Extended-Practicum Experiences (n=226)

Category	Percent of Respondents
1. Personal Challenges and Frustrations	
Financial concerns	32
Workload issues	20
Feelings of isolation	15
Travel problems	7
Instructional/Management difficulties	9
Long-range planning trouble	3
Other (unique individual situations)	6
2. Site-Based Interpersonal Concerns	
Excessive negative criticism	27
Conflict with cooperating teacher	26
Feelings of non-acceptance (not appreciated)	20
Staff cliques/unprofessional demeanor	7
3. University-Related Logistical/Procedural Problems	
Program and organizational inequities	30
Concerns with post-practicum term	27
Practicum is too short	6
First year courses inappropriate	4
4. Concern with the Practicum-Office Policies/Roles	
Problems with practicum in-service Seminars	18
Unprofessional treatment by practicum-office staff	12
Negative manner of college supervisors	9

Note. Nearly all respondents reported two or more negative aspects; hence, the sum of the values reflects these multiple responses and thus totals more than 100%.

Personal Challenges and Frustrations

Ninety-two percent of the respondents expressed concerns that fit into this first category, and nearly one third of this group identified financial concerns as being most negative. Many of these post-interns who cited funding frustrations had no doubt been placed in rural schools (approximately one half of practicum placements each year are in rural areas). Evidence for this fact was that many respondents reported incurring *double costs*, as illustrated by the following response:

"The worst part was my having to relocate. Even though I loved the school and community I was in, it was *very* stressful financially to have to pay rent in the town *and* in [the city], which was necessary. I obviously could not have a job to help because of time limits." Another post-intern wrote: "The most negative was the cost of having to move and to live in another town for four months".

In a second sub-category, one fifth of the respondents reported that the extra workload of the practicum proved to be negative. Typical comments were: "...the extracurricular time expected of interns, when there is so much prep time required during the four months." and "The negative part was how busy I was, and the long hours." In a third sub-theme, fifteen percent of the post-interns (probably those who had received rural placements) cited their feelings of isolation being most difficult, as illustrated by these responses: "the time away from my family," "living away from our support system," and "moving away sucked and there was not any financial support".

Four smaller sub-categories in this theme reflected some teacher candidates' negative views on such personal frustrations as: (a) travel (e.g., "I had to move my family two hours from the city and then relocate back for the last semester" and "I paid tuition for no instruction, and my transportation/living expenses were not alleviated at all"); (b) various instructional concerns (e.g., "It was assessment of students. I had no knowledge of it until the internship" and "Class management was hard. I had a tough time with some classes. I was told by other teachers that these classes were tough"); (c) planning (e.g., "Long-range planning was overwhelming at the beginning of the practicum—due to lack of preparation in university courses"); and (d) unique situations (e.g., "I had to deal with health issues and also a death in the family").

Site-Based Interpersonal Concerns

The second broad category of negative experiences summarized in Table 2 reflected teacher candidates' unpleasant professional relationships. Fifty-three percent of the respondents wrote either of receiving unproductive criticism from supervisory personnel or of having direct conflict with their cooperating teachers. The following comments illustrated these situations: "I got little support from my co-op, yet a lot of negative *criticism*--although how could I correct it when there was no direction?" "...the lack of support from my co-op. I felt completely lost and alone while doing all of my planning," "I felt my co-op was very negative. I feel I did some great things, but never received any positive reinforcement," "My cooperating teacher was sometimes difficult, and stated that my fate was in her control," "The co-op and I clashed, which made it more stressful," and "I had to

compromise many of my ideas and teaching strategies because of my cooperating teacher!"

One fifth of the respondents in this second category believed that the most negative aspect of the extended practicum was that they were not accepted nor appreciated for their professional contributions. Examples of these perceptions were: "I liked the practicum, but it was stressful. I was just the intern," "The staff was divided into different groups. It was hard to fit in as an intern," "The most negative was being looked at as less than a professional by some of the other staff," "There was hierarchy of school authority structure, with the interns at the bottom," "I didn't like the lack of respect towards the intern as a person. My role and responsibilities outside of school were disregarded (my family emergency)," and "A select few of the teachers did not view me as 'a real teacher' and I wasn't respected as I thought I should have been".

Seven percent of the teacher candidates identified the unprofessional department of the staff as the most negative aspect of the internship. This sentiment was reflected in such statements as: "I disliked the staff talking behind each other's back," "The staff as a whole was very clique oriented and I had a hard time making social connections within my school community," and "I felt trapped in collegial infighting".

University-Related Procedural Problems

Altogether, 67 % of the respondents perceived that the most negative aspects of the extended practicum were unacceptable or deficient university policies and procedures related to the program. The largest sub-theme in this category consisted of comments from nearly one-third of the teacher candidates, regarding what they perceived as program weaknesses or inequitable practices. Examples of such comments were: "I feel that the university in no way prepared us for internship," "The entire program should be re-organized to give us more time spent in several experiences in schools right from the first year, rather than all at once in a 16-week internship," "We had to keep a detailed record of professional growth, which our supervisors hardly even looked at. It was a waste of time that I could have spent on actual preparation for teaching," and "They originally asked us for our three choices for internship placement, but a lot of us did not even get one of them".

A second sub-category was related to a concern expressed by 27% of the post-interns about having to return to the College for the final semester of coursework. Illustrative comments were: "Some of the courses we took after internship would have been more useful before," "Having to leave the school and come back to sit in class, rather than to start teaching. I felt

like I lost lots of confidence I had built up during Internship," "Having to return to university for four months of boring and useless classes after completing the fast-paced, intensive, and totally useful internship experience," and "It was coming back to university and being patronized, pigeon-holed, and kept from getting a job (i.e., subbing) for no damn reason...".

Ten percent of respondents in this category complained either that the extended practicum was too short (e.g., "It could have been a full year" and "The four months at the high school doesn't match the school's semester. I wish I could have stayed right to the end of their term"); or that the first year of the undergraduate program was ill conceived (e.g., "We weren't well enough prepared in Year 1" and "Finding out that most of what I learned in my first year of Education had little or no relevance in the school classroom").

Practicum Office Difficulties

As shown of Table 2, a total of 39% of the respondents indicated that the most negative aspect referred to a fourth key theme, which was their concerns related to the faculty office in charge of field experiences. Eighteen percent of the respondents in this sub-category identified problems with the monthly practicum seminars that were organized by the practicum office. Statements illustrating this perspective were: "I found some of the seminars to be a bit useless at times. They were not scheduled for appropriate times during internship and often added to pressure rather than easing it," "The internship meetings were pointless," "... were a waste of time," "...were redundant," "...were *useless*, rambling and time consuming," "... terrible! We had hours of downtime with scattered minutes of content," and "The seminar days would have been better spent with your co-op teacher planning and evaluating together back at the school".

Twelve percent of the post-interns expressed displeasure with how they were treated by the field-experience office personnel. Typical comments in this sub-category were: "The most negative aspect was the hostility and somewhat rude interactions with people in the practicum office," "The rude people at the field office were sometimes helpful, but in a demeaning way," "The internship office was useless. They refused to update the rural housing registry, were belligerent to students, and were lazy (I have several anecdotes)," "The field office people were rude, impatient, belittling and had histrionic fits," "...were uncooperative," "... were grouchy," "...did not treat us as professionals," and "Dealing with the practicum center was so formidable that it made internship intimidating".

Nine percent of the respondents identified that unprofessional treatment by their college supervisors

was the most negative aspect of the internship. Sample comments in this sub-category were: "College supervisors sometimes have unrealistic expectations; they have forgotten what it is like to be an intern," "I found the college advisor comparing interns to be negative," "I had a poor college supervisor who was a very negative and non-encouraging person," and "The college supervisor was very confrontational...not fit for the job...who didn't get along with my co-op and that made it hard on me".

Discussion

We share Clift and Brady's (2005, p. 334) dissatisfaction with the scarcity of research on the contribution of the voice of students to the decision-making process for program planning. Clift and Brady asserted that because students "are seldom heard" (p. 334), decision-makers' program perspectives could thus become too narrow. The result is "[t]his narrow focus inhibits our understanding of both impact and the potential for the changes advocated..." (p. 334). We believe that our present research-report provides relevant information for consideration by program organizers--both from the faculty involved in this study, and from other faculties--as they seek to revitalize the practicum/clinical phase of their professional preparation programs.

Affirming Results

We also noted that the respondents' comments, taken as a whole, appeared to corroborate the findings from research on practicum students' developmental stages of professional identity (Borich, 2000; Fuller & Bown, 1975; Ralph, 2004). We found that the teacher-candidates' responses (collected approximately three months after the completion of their internship) generally reflected the second and third stages of concern identified in Fuller's research (i.e., the areas of *task/technique* and *impact/care*) more than they did the *self/survival* concerns often characterizing beginning practitioners.

The results of this present study not only confirmed previous research with respect to pre-service professionals' positive regard of their practicum/clinical experiences, but the findings were also congruent with those of a similar study conducted thirteen years ago on the same teacher-education practicum program (Ralph, 1994, 1994-1995). Essentially, the positive aspects of the practicum identified by the cohorts of post-interns in both studies were consistent, in that the respondents from the two cohorts identified similar strengths of their respective practicum experiences.

These strengths identified in both studies were that the practicum: (a) granted teacher candidates the opportunity to apply theory to practice; (b) provided

them with a setting, in which to develop their professional knowledge and skills; (c) created an atmosphere conducive to allowing them to *try their wings* by experimenting with different techniques, and by self-reflecting and making adjustments according to feedback received; and (d) established a positive environment for participants to engage in professional collaboration and to profit from mutual support.

It is fitting that the practicum administrators of the program studied at both times should be commended for the fact that the positive attributes identified in the earlier study have apparently been embedded in the field-based program and are still evident. Of course, the organizers will also need to be diligent in maintaining these strengths in their future practicum offerings. However, they will also need to acknowledge the presence of the same negative aspects of the practicum, which appeared to have persisted over that same time period.

Lingering Concerns

It must be noted that these present results and those of previous research from other jurisdictions have also confirmed the phenomenon that practicum programs simultaneously manifest both positive and negative characteristics. Such findings emerged in studies of Clergy Education (Foster et al., 2005); Engineering Education (Silva & Sheppard, 2001); and Teacher Education (Clift & Brady, 2005; Hayes, 2002; Kosnik & Beck, 2003; Larson, 2005).

In our data analysis, we made three other rather troubling observations concerning students' views of the weaknesses of the program they were in. We summarize these observations and their implications below.

A Pervasive Problem

One general observation was that many of our findings were consistent with the overall conclusions reached previously by prominent researchers regarding chronic problems that have been identified in teacher education programs. It appears that little has changed during the past 30 years. For instance, Lortie (1975) reported that although student teachers relished this "learning-by-doing" type of apprenticeship, they were also critical of: (a) parts of their campus-based program and some of their professors, as being too theoretical or impractical; and (b) some of their practicum experiences, in that students were sometimes mismatched with supervisors who were not sympathetic or congenial to their protégés, or who may not have been selected for their ability in assisting novice professionals in the formation of a sound decision-making rationale (p. 71).

Fifteen years after Lortie's study, Guyton and McIntyre (1990) also concluded that the practicum in

teacher education still often seemed disconnected from broader program goals. Then a few years after Guyton and McIntyre's study, researchers again found little evidence to indicate that the then-current field experiences were preparing teacher candidates to be any more reflective and knowledgeable than were those prepared in earlier, more traditional programs (McIntyre, Byrd, & Foxx, 1996; Wideen, Mayer-Smith & Moon, 1998). Later still, Clift and Brady's (2005) review of more recent teacher-education research showed that although this *university/school discrepancy* persisted among pre-service programs, some resolution of the problem was becoming evident. This change was especially observable in programs that emphasized mutual collaboration among the three sub-groups involved in the practicum, i.e., the teacher candidates, school-based mentors, and university faculty/supervisors.

A particular program. Our second observation may be most disturbing to the home faculty of the students we surveyed. We observed that many of the current deficiencies that the respondents delineated in our present study had apparently been in existence for many years (Ralph, 1994, 1994-1995, 2004).

However, we were encouraged to hear that the senior administrators in that faculty are not only aware of the chronic problems mentioned above, but that they have been recently engaged in implementing major initiatives designed to enhance their entire undergraduate program. They reported that they are engaged in re-structuring efforts, such that: (a) the coursework and its underlying theoretical frameworks are being aligned with the latest research in teaching and learning among young people and adults; and (b) the field experience operations are being re-vamped to deal with the weaknesses that had been identified.

The faculty leaders are attempting to revive the spirit of cooperation in this reform initiative by means of three specific efforts:

- by arranging for field-based personnel to do more teaching of the pre-service coursework, either on campus or at the school site (thereby reducing the proverbial theory/practice gap, and demonstrating that all members of participating groups are vital team-players in the program);
- by embedding shorter, pre-internship field experiences within the education methods courses (thereby promoting an earlier connection between university coursework and classroom teaching in the schools), and
- by having practicum supervision conducted by personnel who are well-trained in the mentoring process, who have established a positive rapport with teacher candidates, and who have built a mutual trust relationship with them (thereby

alleviating the anxiety sometimes created by the unproductive *us vs. them* stance).

Practical Solutions

A third troubling observation we made in our study was the fact that several promising solutions had been available to the program leaders in this faculty, but (until lately) had not been fully implemented. We identified at least three sources of these possible solutions: suggestions from the current students, themselves; recommendations from previous research conducted on the program; and successful initiatives available from other institutions or from the broader research literature.

Respondents from the present study offered practical advice worthy of consideration for eliminating the negative aspects and improving the program. Examples were: "Give us more time in classrooms before we get out to interning, so we are prepared," "Tuition should be waived or reduced for internship, or bursaries should be provided," "There should be some kind of screening program involved in getting good cooperating teachers. Some [cooperating teachers] are definitely not suitable" and "The final semester after internship needs to be improved...make it more resource-based, more practical, more school-oriented—not having useless lectures".

The second source of suggested improvements was previous published research reports concerning this same practicum program (Ralph, 1994, 1994-1995, 2004). Specific recommendations from that earlier research included: providing supervisory training for *all* mentors; encouraging *all* rural school divisions to pay interns a monthly stipend to help them offset the extra practicum expenses; and promoting continued collaboration among all stakeholder groups to enhance the field experiences.

The third source for solutions was examples of successful innovations implemented in other jurisdictions, such as using the school plants not only to house the practicum experiences, but to provide a center of practice, where school-based personnel and university-faculty could work collaboratively with the practicum students. In such settings, university coursework is integrated with classroom and school activity, and all three sub-groups of participants are present to share in building a supportive context for learning to engage in practice (Clift & Brady, 2005).

Further Questions

The findings identified in our study evoke pressing follow-up questions that will no doubt have to be addressed by practicum leaders across disciplines. Three such questions are:

- How may practicum organizers establish and/or preserve the positive program features identified in this study?
- To what extent are these positive elements contextual? Or to what extent do they have a capacity for *transferability* (Ward Schofield, 1990, pp. 208-226) between one program and other clinical education programs in the same or different disciplines?
- How may practicum administrators reduce the persistent negative elements in order to create effective innovations in future practicum offerings?

We, the authors of this study, are addressing these critical questions as we complete our larger research project on the future of clinical/practical education across disciplines in Canada (Ralph, Wimmer, & Walker, 2007); and we invite other interested educators to attend to these questions as well in their respective jurisdictions.

A Concluding Comment

We wish to return to the original intention for our larger study. We believe that the work of professionals is of critical importance to society, to the professional disciplines, and to professionals, individually. Consequently, we desire to contribute to the enhancement of professionals' education through this facet of research dealing with students' views of their practicum experiences.

We welcome program organizers from other institutions and disciplines, interested in the practicum/clinical component, to consider our findings in order to help inform their own deliberations on the future of the *experiential learning component* of undergraduate professional education. We agree with Ward Schofield (1990) who advised that such considerations from one context are useful for understanding another similar situation, in the search for the "What is..." or "What may be..." or "What could be..." (pp. 226-227), especially in regards to innovative practicum/clinical education.

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REFERENCES

Abdal-Haqq, I. (1998). *Professional development schools: Weighing the evidence*. Thousand Oaks, CA: Corwin.

Alcaly, R. (2003). *The new economy: What it is, how it happened, and why it is likely to last*. New York:

Farrar, Straus and Giroux.

Angelo, T. (2004, October). *Improving teaching evaluation results: Simple, ethical, research-based, educationally effective strategies*. Presentation to the university community at the University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

Atkinson, D. (2004). Theorising how student teachers form their identities in initial teacher education. *British Educational Research Journal*, 30(3), 379-394.

Beck, C., & Kosnik, C. (2002). Professors and the practicum: Involvement of university faculty in preservice practicum supervision. *Journal of Teacher Education*, 53(1), 6-19.

Bonwell, C., & Eison, J. (1991). *Active learning: Creating excitement in the classroom*. 1991 ASHE-ERIC Higher Education Report. (ERIC Document Reproduction Service No. ED336049)

Borich, G. (2000). *Effective teaching methods* (4th ed.). Columbus, OH: Merrill

Brett, C. (2006). Assisting your pre-service teacher to be successful during field experiences. *Strategies*, 19(4), 29-32.

Bruner, J. (1990). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Bullough, R., & Kauchak, D. (1997). Partnerships between higher education and secondary schools: Some problems. *Journal of Education for Teaching*, 23, 215-233.

Canadian Council on Learning. (2006). *Canadian post-secondary education: A positive record--an uncertain future* (Summary Report on Learning in Canada 06). Retrieved December 12, 2006, from <http://www.ccl-cca.ca/CCL/Reports/PostSecondaryEducation/PSESummary1.htm?Language=EN>

Capa, Y., & Loadman, W. (2004). *Evaluation of mentoring practices experienced by student teachers during a teacher preparation program*. (ERIC Document Reproduction Service No. ED491388). Retrieved July 2, 2006, from <http://eric.ed.gov/ERICWebPortal/custom/portlets/clipboard/performPrint.jsp?accno=ED491388>

Carnegie Foundation for the Advancement of Teaching. (2006). *Undergraduate education: Preparation for the professions* (Clergy study, Engineering study, Law study, Medical education study, Nursing study, Teacher study). Retrieved January 6, 2006, from <http://www.carnegiefoundation.org/programs/sub.asp?key=30&sub>

Clift, R., & Brady, P. (2005). Research on methods, courses, and field experiences. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on Research and Teacher*

Education (pp.309-424). Mahwah, NJ: American Educational Research Association and Lawrence Erlbaum.

Cochran-Smith, M., & Zeichner, K. (Eds.). (2005). *Studying teacher education: The report of the AERA panel on research and teacher education*. Mahwah, NJ: American Educational Research Association and Lawrence Erlbaum.

Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: Belknap Press.

Dewey, J. (1938). *Experience and education*. New York: Macmillan.

Ehrlich, D., & Greenberg, D. (2002). Geriatric mentoring experience for first year medical students. *The Gerontologist*, 42(5), 95-97.

Foster, C., Dahill, L., Golemon, L., & Wang Tolentino, B. (2005). Educating clergy: Teaching practices and pastoral imagination (Preparation for the Professions). Stanford, CA: The Carnegie Foundation for the Advancement of Teaching

Fuller, F., & Bown, O. (1975). Becoming a teacher. In K. Ryan (Ed.), *Teacher education: The 74th yearbook for the National Society for the Study of Education* (Part II, pp. 25-52). Chicago: University of Chicago Press.

Gall, M., Gall, J., & Borg, W. (2006). *Educational research: An introduction* (8th ed.). Boston, MA: Allyn & Bacon.

Gay, L., Mills, G., & Airasian, P. (2005). *Educational research: Competencies for analysis and applications* (8th ed.). New York: Prentice Hall.

Glaser, B., & Strauss, L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.

Goodlad, S. (1984). *Education for the professions*. Guildford, Surrey, UK: Society for Research into Higher Education and NFER-Nelson.

Goodlad, J. (1994). *Educational renewal: Better teachers, better schools*. San Francisco: Jossey-Bass.

Guyton, E., & McIntyre, D. (1990). Student teaching and school experience. In W. Houston, M. Haberman, & J. Sikula. (Eds.), *First handbook of research on teacher education* (pp. 514-534). New York: Macmillan.

Hayes, M. (2002). Assessment of a field-based teacher education program: Implications for practice. *Education*, 122(4), 700-705.

Hughes, C. (2004). The supervisor's influence on workplace learning. *Studies in Continuing Education*, 26(2), 275-287.

Johnson, D., Johnson, R., & Smith, K. (1998). *Active learning: Cooperation in the college classroom* (2nd ed.). Edina, MN: Interaction Book Co.

Jones, T., & Ewing, K. (2002). An analysis of teacher preparation in deaf education: Programs

approved by the council on education of the deaf.

American Annals of the Deaf, 147(5), 71-78.

Keckes, K. (Ed.). (2006). *Engaging departments: Moving faculty culture from private to public, individual to collective focus for the common good*. Bolton, MA: Anker.

Kelly, K. (1999). *New rules for the new economy: 10 radical strategies for a connected world*. New York: Penguin Books.

Knowles, M., Holton, E., & Swanson, R. (2005). *The adult learner: The definitive classic in adult education and human resource development* (6th ed.). New York: Butterworth-Heinemann Elsevier.

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.

Kosnik, C., & Beck, C. (2003). The internship component of a teacher education program: Opportunities for learning. *The Teacher Educator*, 39(1), 18-34.

Larson, A. (2005). Pre-service teachers' field experience surprises: Some things never change. *Physical Educator*, 62(3), 154-163.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.

Leland, C., & Harste, J. (2005). Doing what we want to become: Preparing new urban teachers. *Urban Education*, 40(1), 60-77.

Linn, P., Howard, A., & Miller, E. (Eds.). (2004). *Handbook for research in cooperative education and internships*. Mahwah, NJ: Lawrence Erlbaum.

Lortie, D. (1975). *Schoolteacher: A Sociological study*. Chicago: University of Chicago.

Lougheed, T. (2007). Where researchers tithe their time. *University Affairs*, 48(4), 37.

MacGillivray, L., & Freppon, P. (2000). Reflections over time: Pre-service teachers' images of their first year of teaching. *Action in Teacher Education*, 22(2), 122-132.

McIntyre, E., Byrd, D., & Foxx, S. (1996). Field and laboratory experiences. In J. Sikula, T. Buttery, & E. Guyton (Eds.), *Second handbook of research on teacher education* (pp. 171-193). New York: Simon & Schuster Macmillan

McMillan, J., & Schumacher, S. (2005). *Research in education: Evidence-based inquiry* (6th ed.). Boston, MA: Allyn & Bacon.

Merriam, S., Caffarella, R., & Baumgartner, L. (2006). *Learning in adulthood: A comprehensive guide* (3rd ed.). Mississauga, ON, Canada: John Wiley and Sons.

Ormrod, J.E. (2007). *Human learning* (5th ed.). New York: Prentice Hall.

Ory, J. (2001, September). Faculty thoughts and concerns about student ratings. *New Directions for*

- Teaching and Learning*, 87, pp. 3-15. Retrieved January 18, 2005, from <http://search.epnet.com/login.aspx?direct=true&db=aph&an=9179128>
- Pappone, J. (2007). Research focus shouldn't be too narrow. *University Affairs*, 48(4), 33.
- Piaget, J. (1963). *Psychology of intelligence*. Paterson, NJ: Littlefield Adams.
- Posner, B. (2004). Reflections on experience: Editor's introduction. *Journal of Management Inquiry*, 13 (2), 151.
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223-231.
- Ralph, E. (1993). Sensitive, sensible practicum supervision: A contextual application in Saskatchewan. *The Alberta Journal of Educational Research*, 32, 283-296.
- Ralph, E. (1994). Enhancing the supervision of beginning teachers: A Canadian initiative. *Teaching & Teacher Education*, 19(2), 185-203.
- Ralph, E. (1994-1995). Toward renewal in the practicum: Insights from one college's journey. *Journal of Professional Studies* 2(1), 37-44.
- Ralph, E. (1996). Improving teaching through cross-college collaboration: Reflections on a Saskatchewan experience. *McGill Journal of Education*, 31, 297-318.
- Ralph, E. (1998). *Developing practitioners: A handbook of contextual supervision*. Stillwater, Oklahoma: New Forums Press.
- Ralph, E. (2004). Interns' and cooperating teachers' concerns during the extended practicum. *The Alberta Journal of Educational Research*, 50(4), 411-429.
- Ralph, E. (2005). Enhancing managers' supervisory effectiveness: A promising model. *Journal of Management Development*, 24(3), 267-284.
- Ralph, E., & Konchak, P. (1996). Implications for improving teaching in the health sciences: Some Canadian findings. *Quality in Higher Education*, 2(1), 45-55.
- Ralph, E., Wimmer, R., & Walker, K. (2007). The practical component of professional education: Some Canadian findings. *Proceedings of the 5th Annual Hawaii International Conference on Education*, January 2007, ID # 481.
- Riehl, C. (2006). Feeling better: A comparison of medical research and education research. *Educational Researcher*, 35(5), 24-29.
- Rogman, S., & Hopp, J. (1999). Bridging the classroom to clinic gap. *Physical Therapy*, 79(5), S5.
- Rose, M., & Best, D. (Eds.). (2005). *Transforming practice through clinical education, professional supervision, and mentoring*. New York: Elsevier Churchill Livingstone.
- Schaff-Blass, E., Rozier, R., Chattopadhyay, A., Quinonez, R., & Vann, W., Jr. (2006). Effectiveness of an educational intervention in oral health for pediatric residents. *Ambulatory Pediatrics*, 6(3), 157-164.
- Schon, D. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Schrantz, M. (Ed.). (1993). *Qualitative voices in educational research* (Social Research and Educational Studies Report No. 9). London: Falmer.
- Senge, P., Scharmer, C., Jaworski, J., & Flowers, B. (2004). *Presence: Human purpose and the field of the future*. Cambridge, MA: Society for Organizational Learning.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Shulman, L. (1998). *Teaching and teacher education among the professions: 38th Charles W. Hunt memorial Lecture*. Washington, DC: American Association of Colleges for Teacher Education. (ERIC Document Reproduction Service No. ED468987)
- Silva, M., & Sheppard, S. (2001). Enabling and sustaining educational innovation. *Proceedings of the 2001 American Society for Engineering Education Annual Conference & Exposition*, Session 2330.
- Smith, S., Frey, B., & Tollefson, N. (2003). A collaborative cohort approach to teacher education: Modeling inclusive practices. *Action in Teacher Education*, 2 (1), 55-62.
- Smith, K., & Lev-Ari, L. (2005). The place of the practicum in pre-service teacher education: The voice of the students. *Asia-Pacific Journal of Teacher Education*, 33(3), 289-302.
- Solomon Cohen, S., & Milone-Nuzzo, P. (2001). Advancing health policy in nursing education through service learning. *Advances in Nursing Science*, 23(3), 28-40.
- Statistics Canada. (2002). *Teacher education/educator training: Current trends and future directions*. Retrieved September 12, 2003, from Statistics Canada Web site: <http://www.statscan.ca/english/IPS/Data/81-593-XIE.htm>
- Valli, L. (1993). Reconsidering technical and reflective concepts in teacher education. *Action in Teacher Education*, 15(3), 35-44.
- Vygotsky, L. (1978). *Mind in society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Waddell, D. (1999). Prospect of unique nursing shortage imminent. *Georgia Nursing*, 59(3), 10.
- Ward, R., & Saylor, C. (2002). Nursing school curricula and hospital-based training programs. *AORN Journal*, 76(6), 1022-1031.

Ward Schofield, J. (1990). Increasing the generalizability of qualitative research. In E. Eisner & A. Peshkin (Eds.), *Qualitative inquiry in education: The continuing debate* (pp. 201-232). New York: Teachers College Press.

Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach. *Review of Educational Research*, 68(2), 130-178.

White Watson, S. (2004). *Professional development school and teacher preparedness: perceptions of student teachers*. (ERIC Document Reproduction Service No. ED490362). Retrieved July 2, 2006, from <http://eric.ed.gov/ERICWebPortal/custom/portlets/clipboard/performPrint.jsp?accno=ED490362>

Wonacott, M. (2000). *Apprenticeship* (Trends and Issues Alert No. 19). Columbus, OH: Center on Education and Training for Employment, College of Education, Ohio State University. Retrieved March 11, 2006, from <http://ericacve.org/fulltext.asp>

Wolfensperger Bashford, C. (2002). Breaking into orthopaedic nursing: Preceptorship for novice nurses. *Orthopaedic Nursing*, 21(3), 14-20.

Woods, D. (1994). *Problem-based learning: How to gain the most from PBL*. Hamilton, ON, Canada: McMaster University Bookstore.

Woullard, R., & Coats, L. (2004). The community college role in preparing future teachers: The impact of a mentoring program for pre-service teachers. *Community College Journal of Research and Practice*, 28(7), 609-624.

Zeichner, K. (1996). Designing educative practicum experiences for prospective teachers. In K. Zeichner, S. Melnick, & M. Gomez (Eds.), *Currents of reform in pre-service teacher education* (pp. 215-234). New York: Teachers.