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**An Intrinsic Case Study of an Online Workshop:
Learning How to Facilitate Interprofessional Collaborative Practice**

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Presented to
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In Partial Fulfillment
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Janet Tareilo¹ explains that “The quest for the doctorate degree in education equates to completing a marathon race that requires extensive training, undeterred endurance, and utter commitment to the educational process” (§ 1). I contend that a doctorate degree also requires an extensive and committed community of support.

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¹ Tareilo, J. (2006). *The road to successfully completing doctoral studies: A tale of a cohort model*. Retrieved April 20, 2009, from <http://cnx.org/content/m14600/latest/>

Because this study was anchored in the design and development of an online workshop, the object of this case study would never have seen the light of day without the commitment and expertise of Marc Bélanger, Diane Bouchard-Lamothe, Lucie Couturier, and Rémi Rousseau. Every idea was explored and together we were a formidable team in making our most ambitious learning activities come to fruition.

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Abstract

Collaborative patient-centered practice (CPCP) is an area of interest for continuing education in healthcare because it has the potential to increase the efficiency and effectiveness of health services. Because ELearning is becoming increasingly popular, the primary purpose of this qualitative intrinsic case study was to examine the design, development, delivery, and evaluation of a non-credited, six-week, continuing education online workshop about interprofessional education for collaborative patient-centered practice (IECPCP). This workshop was offered at no cost to the participants. The secondary focus of this study examined the self-reported outcomes that participants perceived they had achieved through the workshop in terms of the knowledge, skills, attitudes, and practices necessary to stimulate CPCP in the workplace.

Three groups of participants (a total of 31 participants), were included in this intrinsic case study. The first group of six participants took part in a survey-based needs analysis to inform the design of the workshop. The second group of three participants formed the production team. During interviews, the production team members offered retrospective feedback on the design and development of the workshop based on the learners' comments. The third group of 22 participants included the learners who registered in the workshop and completed one or more data collection methods designed to capture their eLearning experience. The data collection methods included a pre-workshop survey, a temperature check, a post-workshop survey and email, and a post-workshop interview. A descriptive analysis was completed for the survey data and course records. The interview data was subjected to an interpretive analysis using the constant comparison method. All data sets were triangulated and interpreted through the lens of socioconstructivism with specific emphasis on Vygotsky's sociocultural theory.

The results showed that in a continuing education context where learners are not asked to pay a registration fee, the rate of participation in an online workshop is closely linked to personal and professional motivational factors that can outweigh all design aspects of the learning resource. This study also showed that the more time the learners spent interacting with the learning resource, other learners, and the facilitator, the more they reported examples of the following: moving from knowledge construction about CPCP toward the development of CPCP skills; the adoption of attitudes conducive to CPCP; and the application of practices that stimulated CPCP in the workplace. This intrinsic case study suggests that all aspects of motivation and participation should be integrated within an eLearning model to influence the way online programs are designed, developed, delivered, and evaluated for this particular target group of learners. Integrating the concepts of motivation and participation into online program design, development, delivery, and evaluation will likely create an environment that stimulates active engagement in the online learning process.

CHAPTER 1

Introduction

This chapter describes the foundation on which I based the qualitative intrinsic case study¹ that forms the basis for this thesis. The goal of the chapter is to expose the societal context for the study and provide a synopsis of three relevant topics: continuing education, eLearning², and interprofessional collaboration. It also describes how these topics are aligned within the context of healthcare. This chapter then presents the research problem, the purpose of the study, and the research questions used to guide this study.

Societal Context

Overview of Continuing Education in Healthcare

Since the turn of the century, the advent of new technologies has created an ever increasing need for specialised education for lifelong learning (Jean, 2001). Gilbert (2007) affirmed that this “Knowledge Society is linked with developments in information and communications technologies and globalization” (p. 4). She argued that in this new context, knowledge should not be viewed as a “thing” but as a “process” that behaves more like energy than matter, and that knowledge “can’t be divided up into *disciplines* [but rather] develops on a *as-and-when-needed* basis” (p. 6). The emergence of this knowledge society has in turn caused governments and learning organisations to examine how they plan for and deliver education programs (The Advisory Committee for Online Learning, 2001). To meet workplace demands, governments and learning organisations must find ways to foster the development of flexible

¹ According to Stake (2008), an intrinsic case study is undertaken to better understand a particular case because the case in itself is of particular interest.

² ELearning is defined as “the development of knowledge and skills through the use of information and communication technologies (ICTs) to support interaction for learning – interactions with content, with learning activities and tools, and with other people” (Rossiter, 2005, p. 5). A more thorough explanation of eLearning is presented in the review of the literature. The term ELearning / eLearning has a number of accepted spelling options, including e-learning and elearning. ELearning / eLearning will be used throughout the thesis except in direct quotes or official organisation names to emphasise the importance of “Learning” rather than the technology.

lifelong learners who are able to take responsibility for their education and have strong communication, thinking, learning, and teamwork skills (Bloom & Kitagawa, 1999; Conference Board of Canada, 1991).

Healthcare providers³ are continually confronted by the realities of a knowledge society, due in part to the rapid growth of healthcare technology, methods of healthcare service delivery, and research-based advancements (Health Professions Regulatory Advisory Council, 2006). Entry to practice training is not sufficient to maintain competency⁴ in the rapidly evolving field of healthcare. Governments in most industrialised countries have recognised this and have appointed governing bodies responsible for determining scopes of practice⁵, overseeing the continual competency of members, providing licences to practice, enforcing disciplinary measures, and listing policies and legislative regulations to govern healthcare professions. In Ontario, there are currently 21 regulatory colleges⁶ that govern 23 healthcare professions. The Health Professions Regulatory Advisory Council (HPRAC) affirmed that in the interest of protecting the public, Professional Colleges in Ontario have the responsibility of ensuring that “professionals providing care are continuously qualified and competent” (p. 13). The HPRAC also emphasised that professional colleges “must develop, establish and maintain standards of knowledge and skill and programs to promote continuing competence among the members” (p. 15). Without exception, whether provincially, nationally or internationally, governing bodies

³ Healthcare providers include individuals from regulated and non-regulated healthcare professions, healthcare workers, social science personnel or any other trained personnel that may interact with patients, families, and other caregivers in the healthcare setting. Healthcare providers may be used interchangeably with healthcare practitioners throughout the text.

⁴ A competency can be defined as an integrated set of knowledge, skills, attitudes, and practices that enable one to judge when to apply and effectively perform the activities of a given occupation or function to the standards expected in employment (Roegiers, 2000; Scallon, 2004; Tardif, 2006).

⁵ Scope of practice refers to the limitations and extent to which a healthcare professional can practice usually determined by a set of laws or regulations (HPRAC, 2006).

⁶ Regulatory colleges are the governing bodies that serve as the basis for Ontario’s health professions self-regulation system. They are responsible for determining standards and scopes of practice and for protecting the public’s interest (HPRAC, 2006).

responsible for licensing healthcare professionals have all adopted policies that require their members to engage in annual continuing education programs. How member participation is monitored varies from one profession to another. Unfortunately, not all healthcare providers belong to one of the regulated healthcare professions. According to Davies (2007), regulation needs to extend to all individuals who interact with patients⁷ because they should all be held accountable for the quality of care and services delivered and be subjected to external motivators to pursue continuing education. Regardless of whether healthcare providers are regulated or not, the healthcare field still places significant value on the importance of continuing education. Administrators and healthcare agencies hold a positive view of healthcare providers who engage in continuing education activities (Cobb, 2004).

Overview of ELearning in Healthcare

Healthcare providers are busy working adults with competing personal and professional obligations. Finding ways to participate in continuing education programs over and above these obligations has become a burden they must struggle to overcome. Consequently, healthcare providers are increasingly searching for quality, affordable, flexible, and accessible continuing education programs (Filion Carrière, 2001; Olsen & Shershneva, 2004). ELearning has commanded particular attention in healthcare because it provides new ways to conceptualise and deliver continuing education programs that are responsive to the learners' needs regardless of geographical location, social obligations or time constraints (Barone, 2001; Hobbs, Taylor, & Armstrong, 2000; Wutoh, Boren, & Balas, 2004). Furthermore, eLearning provides a wide range

⁷ There is substantial debate pertaining to the title we should attribute to individuals who receive healthcare or health services in Canada. According to the Champlain district Local Health Integration Network (LHIN), patients, clients, recipients, end-users, and consumers are the most commonly used terms (personal communication with Jocelyne Contant, former Senior Director, Planning, Integration & Community Engagement, personal communication, July 25th, 2007). To be inclusive, the LHIN has adopted all these terms in their publications although they prefer to use "consumer of health services". To facilitate reading, I will use the term patient throughout this text with the intent that it includes the terms client, recipient, end-user, and consumer.

of applications that have sparked meaningful discussion about the integration of learner-centered teaching paradigms and the use of different pedagogical approaches to stimulate the construction of knowledge (Dornisch & Land, 2002; Finke, 2000; Wilson, 2002). Learning is no longer limited to face-to-face (f2f) encounters but is distributed between a variety of on- and off-site opportunities where learners can manipulate eLearning tools to interact with each other, the facilitator, the computer, and content available on the Internet in an effort to direct their own learning process (O'Reilly & Newton, 2002; Tu & McIsaac, 2002). ELearning has therefore become part of the solution to maintain the competency of healthcare practitioners by enabling learning organisations to provide increased access to quality continuing education programs (MacDonald, Stodel, & Casimiro, 2006).

My interest in eLearning continuing education programs for healthcare providers stems from my work experience with the Consortium national de formation en santé (CNFS). At the CNFS, I was involved in the design, development, delivery, and evaluation of online continuing education programs for a number of years and during this time I developed an interest in understanding the effectiveness⁸ and efficiency⁹ of eLearning for the healthcare continuing education market. Based on my personal work experience as a clinical physiotherapist, I was also keenly interested in seeking out ways to promote collaboration between healthcare providers. In fact, I had noticed that healthcare providers were, for the most part, uncomfortable with sharing roles and responsibilities and preferred to work on discipline-specific goals rather than on collaborative team goals. I thought that it would be innovative to design a continuing education workshop to teach about the concepts of collaboration in the workplace. To do so, I wanted to

⁸ Effectiveness “involves evaluating if the system actually supports the requirements of the educational setting and learning needs” (McPherson & Nunes, 2004, p. 100).

⁹ Efficiency includes “with what expenditure of time, equipment, additional technical and pedagogical support, or overall cost, the educational function is fulfilled” (McPherson & Nunes, 2004, p. 100).

take advantage of eLearning tools to promote interactivity and collaboration between learners within the online environment. I was particularly interested in developing a continuing education program that could effect sustainable change in interprofessional collaborative healthcare practices. I decided that I wanted to focus my eLearning effort on training educators of interprofessional practice who are able to stimulate others, either colleagues or students, to adopt a collaborative approach.

Overview of Collaboration in Healthcare

While reviewing the literature on interprofessional collaborative practice, I found that in the past three decades, much attention had been paid to the way healthcare teams worked together and how they should be trained to improve effectiveness and efficiency. It seemed that the initial discussions on the topic of collaboration were prompted in the 1970's by a shift from institutional to community-based care in many industrialised countries (Warner & MacAlister-Smith, 1996). The recommendations in favour of interprofessional collaboration multiplied as shortages of healthcare providers were documented, particularly in remote or rural communities and as the complexity and chronicity of healthcare problems increased with improved longevity (Barr, 2002; Shortell, 2000; World Health Organisation, 1988; 2000, 2001). In this evolving healthcare climate, one single type of professional was no longer sufficient to deliver the required care (Gilbert 2005a; Hall & Weaver, 2001). In time, advantages of interprofessional collaboration were documented, including improved working relationships, decreased staff turnover rates, improved patient satisfaction, more efficient and better quality of care, and greater cost-effectiveness (Aston, Shi, Bullôt, Galway, & Crisp, 2005; Pearson & Pandya, 2006). Still, Meads and Ashcroft (2005) explained that the nature of the collaboration described in most studies is not clear, making it imperative to define the concept of interprofessional collaboration

and to conduct studies within a well-articulated framework. They argued that this would provide a clearer view of what worked, how it worked, and why it worked in the context of interprofessional collaboration.

Since the turn of the new millennium, the Canadian healthcare industry has been at the forefront of developments in interprofessional collaborative initiatives and has focused its attention on developing a clear framework in which to build these initiatives (Oandasan et al., 2006). The interest in interprofessional collaboration was in part spurred by the Kirby report (2002) and the Romanow commission (2002), which strongly supported changes in the healthcare system toward a collaborative approach. Health Canada's human health resource strategy concentrated a considerable portion of its effort on facilitating interprofessional collaboration as a means to improve the timely access to high quality healthcare services. In 2003, Health Canada examined the terminology used in relations to interprofessional collaboration as part of its strategy and stated that

The notion of "Collaborative patient-centered practice" [CPCP] was the formulation identified by Health Canada as a key to promote active collaboration among several healthcare disciplines and professions in the process of providing healthcare ... Collaborative patient-centered practice enhances patient – family – and community centered goals and values, provides mechanisms for continuous communication among care givers, optimises staff participation in clinical decision-making (within and across disciplines), and induces respect for the contributions of all disciplines including patients' contribution to their own care (Health Canada, 2005, ¶ 5).

In essence, CPCP depends on sharing as well as on participation from all team members including patients, family members, healthcare providers, and community program

representatives, to arrive to a common understanding of the care and the services that are required (Way, Jones, & Busing, 2000). Based on Health Canada's interpretation of CPCP, decisions should be shared and correspond with patients' interests rather than healthcare providers' personal and professional views.

Experience has shown that members of a healthcare team don't naturally gravitate towards CPCP and don't necessarily appreciate the value of sharing responsibilities that they perceive to be their own. Several authors suggested that this is in part due to the way the education system is structured and noted that the system has failed to evolve with workplace needs for CPCP (Barr, 2002; Oandasan & Reeves, 2005a, 2005b; Stephenson, Peloquin, Richmond, Hinman, & Christiansen, 2002). To work as a team, healthcare providers such as occupational therapists, physiotherapists, physicians, nurses, special education teachers, speech language pathologists, personal support workers, and dieticians must understand each other's role and implicitly understand how to work together (Department of Health - UK, 2000; Hayward, DeMarco, & Lynch, 2000; Interprofessional Care Steering Committee, 2007). Yet colleges and universities have traditionally taught academic components of various healthcare disciplines in a compartmentalised fashion. Each discipline has its own distinct body of knowledge or discipline-specific courses. Even the administrative structures in colleges and universities often prevent CPCP (Gilbert, 2005b). Some health and social care programs are offered by colleges while others are offered by universities at undergraduate or graduate levels. In addition, length of study varies between one to four years or more, course schedules are incompatible, and programs, departments, schools or faculties are often physically located on different campus sites. Some universities or colleges have grouped healthcare disciplines together to teach general topics such as pain physiology or bioethics, and complement clinical

training activities with some form of CPCP activities (Berkowitz, 2000; Brand & Hayes, 2002; Charles, Bainbridge, Copeman-Stewart, Art, & Kassam, 2006). Despite these efforts, concepts of collaboration between healthcare professionals are mostly taught within each discipline as an academic topic and formal contact between learners from different healthcare disciplines rarely occurs (Barr, Freeth, Hammick, Koppel, & Reeves, 2000; Geller et al., 2002; McNair, Brown, Stone, & Slims, 2001).

Link between Continuing Education, Collaboration, and ELearning

The previously described compartmentalised way of functioning in healthcare education continues once practitioners enter the workforce. This is partly due to the way the professions are regulated. Each regulatory college decides how their members should practice and what their members need to learn to maintain competence. This has led to a continuing education market that tends to be structured in a discipline-specific manner, because each profession is looking out for its own interests for the sake of accountability. In other words, the current interest is for the maintenance of competencies within individual scopes of practice and don't include, as of yet, clear requirements for interprofessional competencies. This professional channelling by the regulatory bodies has been identified as a significant barrier to CPCP in the workplace (Hudson, 2007). Lahey and Currie (2005) argued "for a transformation in regulatory culture comparable to the change in practice culture ... to make interprofessional practice possible" (p. 198) and the Canadian government has taken heed of this advice. For example, on June 28, 2007, George Smitherman, the Ontario Minister of Health, asked the HPRAC to "recommend mechanisms to facilitate and support interprofessional collaboration between health Colleges" (p. 1). The Minister of Health's referral to the HPRAC implies that there will likely be, in the future, changes to the way professions will be asked to view role sharing in the workplace. As a result, I

feel it is reasonable to predict that there will be a significant increase in the demand for cross-discipline CPCP continuing education programs even though evidence to support the effectiveness of interprofessional education on patient care outcomes are only starting to emerge (Reeves, Zwarenstein, Goldman, Barr, Freeth, Hammick, & Koppel, 2008).

There is also the question of whether it is preferable to involve healthcare providers in interprofessional education for collaborative patient-centered practice (IECPCP)¹⁰ before they enter the workforce at the pre-licensure level or after they enter the workforce at the post-licensure level. Barr, Koppel, Reeves, Hammick, and Freeth (2005) found that pre-licensure healthcare providers exposed to some form of education about CPCP tended to be more receptive to the approach. They went on to report that, unfortunately, these newly licensed healthcare providers invariably adopted the culture of the work environment once they integrated into the workplace. Barr et al. also found that training post-licensure healthcare providers yielded much promise for adopting CPCP in the workplace. They added, however, that achieving a widespread change in behaviour at the post-licensure level was more difficult than at the pre-licensure level because of years of adherence to compartmentalised professional cultures. Consequently, Barr et al. suggested that receptivity to CPCP should ideally be fostered at both the pre-licensure and post-licensure levels at the same time.

Keeping Barr et al.'s (2005) recommendation in mind, I believe that training post-licensure healthcare providers to become CPCP educators through an eLearning continuing education program could go a long way toward effecting sustainable CPCP change in the workplace. These educators would represent post-licensure healthcare providers who are keenly

¹⁰ Interprofessional education for collaborative patient practice (IECPCP) is a term adopted by Health Canada (2004). However Interprofessional education (IPE), common learning, shared learning, and collaborative learning are often used in the literature. This thesis will use IECPCP throughout the text although other terms may surface in direct citations.

interested in CPCP and are in a position to influence the way pre- and post-licensure healthcare providers learn and work together. These educators therefore include clinical professors, managers, team leaders, student supervisors or any other post-licensure healthcare provider who can influence change in their workplace in either the academic or clinical setting. I suggest that targeting this group of healthcare providers for CPCP education training can impact both the pre- and post-licensure levels at the same time because these educators could be called upon to intervene at either level. In support of this choice of learners, Steinert (2005) has argued that faculty¹¹ in the healthcare sector need to learn together so they may in turn teach together. Still, in her systematic review¹², she did not find one study examining faculty training in the academic setting. Similarly, although Barr et al. found in their systematic review that 79% of the included studies examined post-licensure education programs, they found no published studies examining the training of CPCP educators in the clinical setting. Training educators to become CPCP champions is therefore relatively new in the field of IECPCP especially as it pertains to the use of eLearning technologies.

Research Problem

Because eLearning is an innovative and effective pedagogical approach to learning, it appears to be an appropriate choice to deliver a workshop aimed at training CPCP educators across Canada. ELearning promotes collaboration between learners, supports novel and relevant learning activities and offers accessible training to busy working adults regardless of their geographical location.

¹¹ Faculty is a term that includes regular and full-time personnel that have instruction or research functions in an academic institution (University of Ottawa, 2006).

¹² Systematic reviews serve the reader by grouping, summarising, and generalising the evidence on a particular topic. It implies a systematic approach of assessing research on the effects of healthcare interventions (Casimiro & Brosseau, 2002; Starr & Chalmers, 2003).

Unfortunately, there are few, if no published examples or studies of an IECPCP learning workshop designed to train CPCP educators — post-licensure healthcare providers trained to stimulate CPCP in the workplace (Barr et al. 2005). Furthermore there are very few studies exploring the use of eLearning for IECPCP purposes (Zwarenstein, Reeves, & Perrier, 2005) or for continuing education in general (Abrami et al., 2006). It is therefore imperative to examine which elements of design, development, delivery, and evaluation should inform an eLearning IECPCP workshop to provide guiding principles for further course offerings in this field. This would help fill an existing gap in our knowledge about current eLearning continuing education resources for healthcare providers especially about resources related to IECPCP.

Purpose of Inquiry

The purpose of this intrinsic case study was to explore the process of designing, developing, delivering, and evaluating an IECPCP eLearning continuing education workshop intended for post-licensure healthcare providers interested in stimulating CPCP in their workplace. Specifically, this study examined how careful planning of an online workshop according to its structure, content, delivery, and service was perceived by learners and what self-reported examples of outcomes the learners thought they had achieved. Ideas and information gleaned from this study can be used to inform the development of other similar workshops. It was decided a priori that the workshop would

- Target individuals who were in a position to influence the way pre- or post-licensure healthcare providers worked and learned together and the way they delivered care;
- Follow the Demand Driven Learning Model (DDLDM) (MacDonald, Stodel, Farres, Breithaupt, & Gabriel, 2001) as a quality standard for workshop design, development, delivery, and evaluation;

- Refer to the IECPCP framework (D'Amour & Oandasan, 2004, 2005) to help learners develop the specific knowledge base, skill set, attitudes, and practices to allow them to stimulate CPCP change in their work environment;
- Rely on the androgogical model (Knowles, Holton III, & Swanson, 2005) in terms of adult learning principles.

Research Questions

The study was guided by one main research question and one secondary research question. The main research question relates to the DDLM's five constructs and is stated as follows:

What are the factors that facilitate and undermine the effectiveness¹³ of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

For this study, the term *structure* includes issues related to the design portion of the workshop, such as the topics that are covered, the length of the workshop, when it is offered, the number of units, the kind of interaction that is planned between the learners and with the facilitator, the types of pedagogical activities, evaluation and media that are chosen, and how the website is organised (icons, hyperlinks, menu, etc.). *Content* encompasses texts, voice-overs, examples, scenarios, and questions displayed throughout the workshop. *Delivery* relates to workshop facilitation, the participants' interaction with the technology itself, as well as issues of accessibility and flexibility. *Service* corresponds to the responsiveness of the facilitator and other client-service personnel to learner inquiries, the help provided by technical support personnel, and the satisfaction of the learners with the learning organisation itself.

¹³ Although the focus of this study was on effectiveness (see footnote 7), the study participants occasionally brought forth elements of efficiency (see footnote 8). In such instances, the distinction between effectiveness and efficiency was not emphasised as the focus was on presenting the participants' experience.

The DDLM construct identified as *outcomes* in the first research question is further refined with the four educational outcomes presented in the IECPCP framework as presented in the following secondary research question:

What self-reported outcomes, with regards to CPCP knowledge, skills, attitudes, and practices, will healthcare providers perceive they have achieved or facilitated in their workplace as a result of their participation in an IECPCP eLearning continuing education workshop?

In the context of this study, *knowledge* is “the information we acquire, how it is organised into what we already know and an understanding of how and why it is used” (Ehrlich & Kommel, 2000, ¶ 1). *Skills* indicate a “general capacity to perform a set of tasks developed through the acquisition and/or training which require more than just knowing about the subject” (Ehrlich & Kommel, ¶ 1). *Attitudes* relate to the affective domain of learning and “is about gaining new perceptions (e.g., self-confidence, responsibility, respect, dependability, and personal relations)” (Ehrlich & Kommel, ¶ 1). *Practices* “are techniques, methodologies, procedures, and processes that are used in organisations to get the job done” (Stuhlman, 2006, ¶ 1). They refer to the actual performance and the construction of knowledge and skills within the appropriate context (Thinkexist, 1999-2006).

In summary, the main research question corresponds to the five constructs of the DDLM: *structure, content, delivery, service, and outcomes*. The secondary question expands on the DDLM’s construct of *outcomes* by referring to the description provided in the IECPCP framework, which includes *knowledge, skills, attitudes, and practices*.

CHAPTER 2

Review of Literature

An extensive literature search of professional journals, government reports, documents available on the Internet, and textbooks relevant to the topic of this study revealed three main groups of concepts: elements of continuing education, elements of eLearning, and elements of interprofessional practice. The latter is the approach to service delivery that Health Canada termed collaborative patient-centered practice (CPCP)¹⁴. The purpose of this chapter is to provide an overview of each group of key concepts as they relate to the study.

Regarding continuing education and eLearning in healthcare, I define the concept of continuing education and discuss its importance in healthcare. Then I expose the link between continuing education and various views on adult learning principles.

Regarding eLearning, I provide a definition and present its importance for continuing education in healthcare. I also position the eLearning approach within the constructivist and socioconstructivist perspectives with particular attention to Vygotsky's sociocultural theory. Finally, I provide a rationale for choosing the Demand Driven Learning Model (DDLm) in this study.

Regarding CPCP, I define the term as well as other relevant concepts and then link CPCP with issues of professional culture. I define interprofessional education for collaborative patient-centered practice (IECPCP), position continuing education programs for post-licensure healthcare within the context of IECPCP, and expose associated educational strategies. Finally, I describe the IECPCP framework and provide a rational for choosing this framework to guide the educational content and outcomes for the eLearning workshop developed for this study.

¹⁴ Interprofessional practice is more frequently used in the literature. The term collaborative patient-centered practice (CPCP) is specific to Canada. These two terms will be taken to have the same significance in this text.

Continuing Education in Healthcare

Defining Continuing Education and Relevant Concepts

There is a need for perpetual training among healthcare providers to maintain competency. In her discussion about the propositions of the Commission Jean held in 1982 for the United Nations Educational, Scientific and Cultural Organization - UNESCO, Jean (2001) stated, "Adults in the workplace see their roles evolve and their tasks modified in a way that maintaining employment requires a constant upgrading of qualifications and competencies [translated]" (p. 219). In fact, to become lifelong learners is now part of the core competencies of many healthcare professionals (Goertz Koerner, 2003; Manning & DeBakey, 2001). Healthcare providers themselves value continuing education as exemplified by a number of studies on the subject. For example, Matillon, LeBoeuf, and Maisonneuve (2005) conducted an extensive study of 16 regulated health professions in France to understand how competency is defined and maintained, and then proposed guidelines to inform future policies developed by the French Ministry of Health. A total of 265 semi-structured interviews were completed with regulated healthcare professionals and results showed that 99.3% of the respondents felt that continuing education was necessary to maintain competency. The authors affirmed that in France, "healthcare professionals would like to have a better system that allows them to exchange more information on the main healthcare issues" (p. 294). Based on comprehensive qualitative data, the investigators concluded that continuing education was part of the solution to maintain the competency of healthcare providers in France and to promote lifelong learning. In a Canadian example, Kenny, Sargeant, and Allen (2001) examined learning preferences and learning patterns of 28 physicians practicing in Nova Scotia. The purpose was to understand how to facilitate lifelong learning in ethical practice. Physicians were asked to complete a self-

assessment questionnaire and to participate in focus groups to discuss their learning needs. Based on the physicians' responses, the investigators concluded that "continuing education in ethical practice is a crucial and challenging component of lifelong learning where more research is needed on what issues, tools, and methods really make a difference in the experience of patients and practitioners" (p. 31). In interpreting the findings, it must be kept in mind that this study is circumscribed to physicians in one Canadian province and reflects only on education for ethical practice thus limiting the applicability of the results.

Because lifelong learning and continuing education are considered important for maintaining a competent workforce in healthcare, it is necessary to examine what these terms mean. According to Field (2006), lifelong learning represents a new way to conceptualise adult education and implies that "learning may stretch out across a lifetime" (p. 9). Relying on Edwards' (1997) work, Field went on to say that lifelong learning

Celebrates and promotes a fragmented and distributed view of learning ... [where] learning lies not with a small group of readily identifiable specialists but with a vast range of people who might at some time shape the environment in which adults undertake their learning (p. 22).

In his writings, Field defends the mission of lifelong learning, a concept referred to as lifelong education in the 1960s and 1970s. Indeed, lifelong education was promoted from a humanistic perspective by organisations such as UNESCO to help individuals fight for human rights and globally change human condition (Merriam, Caffarella, & Baumgartner, 2007). In the 1990s, lifelong education became known as lifelong learning and took an economical and political turn linked to issues of globalisation (Payne, 2006; Rubenson & Walker, 2006). The importance of a skilled and knowledgeable workforce to increase market profitability was recognised in Canada

and, as in most industrialised countries, lifelong learning became part of increasing the value of human capital¹⁵ (Bouchard, 2006; Zepke, 2005).

In the healthcare field, professional colleges are in the business of ensuring the quality of human capital and view lifelong learning as a means of maintaining and increasing the competency of its adult membership. Healthcare providers are expected to regularly engage in educational activities once they enter the workforce and this expectation is part of their lifelong learning activities. Continuing education represents an important component of the educational activities promoted by the professional colleges and can be defined, in reference to adult learning, as a way “of furthering one’s education beyond the significant level which has already been achieved” (Selman, Cooke, Selman, & Dampier, 1998, p. 19). For continuing education to be effective, healthcare providers must continually re-evaluate their knowledge and practices to direct their attention towards appropriate learning activities (Estabrooks, Thompson, Lovely, & Hofmeyer, 2006). The information and training available to healthcare providers must also correspond to their needs and convey the most recent and relevant information.

Although North American governments have invested heavily in research related to efficient and effective public health and clinical interventions, the best ways to bridge knowledge, skills, and attitudes in the workplace are still not clear (Kerner, 2006). Authors such as Lavis (2006) contend that educators play a central role in influencing policies on what issues should be learned, how they should be learned and what incentives should be used to stimulate healthcare providers to learn what needs to be learned. In support of this view, Jean (2001) stated, “The *Commission* believes it is up to administrators and adult educators to respond to learning needs in terms of content and to stimulate an increase in educational possibilities by

¹⁵ Human capital: “The main idea is that although humans possess tangible financial capital such as bank accounts and stocks, they are also the repository of knowledge, skills, and qualities that can also be considered capital” (Bouchard, 2006, p. 165).

adapting the administrative norms and policies [translated]” (p. 72). Continuing education is therefore a way to address the learning needs identified by healthcare providers, to bridge the gap between the scientific and the practical world, and to influence educational policies through the educators’ recommendations.

In healthcare, work-related continuing education is specific to post-licensure providers and corresponds with many different types of educational programs. These programs can include formal¹⁶ credentialing courses such as graduate studies (e.g., certificate, masters, and doctorate) and formal specialised training offered by either academic institutions (e.g., training to move from registered nurse to nurse practitioner), or professional associations in healthcare (e.g., a physiotherapist who obtains the special designation of “acupuncture-trained”). Programs that offer extra credentials or special designations are expensive and require the learners to complete a number of courses to receive certification. These programs often lead to career advancements or access to desired job opportunities. There is another group of topic-based, non-formal¹⁷, and deliberate training sessions, often called professional development programs, designed to help healthcare providers with their daily work activities. These can include a training session offered by employers to implement a new method of care, a workshop on evaluating evidence or a conference on time management strategies. There may or may not be any cost involved depending on who offers the program and participation in these programs may or may not be considered for career advancement. Professional development programs can be offered by colleagues, by educators recognised as experts in their field, by professional associations or by

¹⁶ Formal learning takes place in “a prescribed learning framework” and within “an organised learning event or package”. There is “the presence of a designated teacher or trainer” and involves “the award of a qualification or credit”. There is an “external specification of outcomes” (Eraut, 2000, p. 114).

¹⁷ Non-formal, deliberate learning occurs at a “time specifically set aside for that purpose” (Eraut, 2000, p. 115). From the learner’s perspective, learning is intentional; however the educational program is not validated by credits or a title (Cole, Hodgkinson, & Malcolm, 2002).

healthcare organisations. Jean (2001) referred to professional development as education linked to the workplace that corresponds to personal, organisational, social, and economic needs and explained that these types of educational programs “should strive to promote the development of the workers’ full capacity ... and should call upon their autonomy, their sense of responsibility and their intelligence [translated]” (p. 221). How this can be enabled is a current and relevant topic for research in adult education (Fenwick, 2006).

It is important to position the IECPCP workshop proposed in this study within the realm of adult education and particularly continuing education as this context influenced the structure, content, delivery, and evaluation of the learning workshop as identified in the primary research question. Accordingly, this case study examined a continuing education workshop aimed at professional development and was offered at no cost to the participants. It was non-formal and deliberately structured for healthcare providers who chose to participate out of interest but did not receive a title, a designated specialty or a degree as a result of their participation. Nevertheless, four professional associations¹⁸ recognised the workshop and participants could apply their participation toward continuing education credits where applicable. Although the workshop provided a set of learning objectives, the learning was both learner- and facilitator-led.

Adult Learning Principles of Andragogy

Approximately 95% of adults in Canada are involved in non-formal learning, more than any other industrialised country (Livingstone, 2001). To respond to such demand, it is imperative to understand the particularities of adult learning and propose specific and responsive approaches to education (Merriam et al., 2007). The purpose of this section is to specifically review the andragogical model as well as a few select complementary writings on adult learning. These

¹⁸ The workshop was recognised by the Canadian Physiotherapy Association, Canadian Association of Occupational Therapists, Canadian Association of Speech-Language Therapists and Audiologists, and Canadian Nurses Association.

principles were considered during the design, development, delivery, and evaluation of the IECPCP eLearning continuing education workshop produced for this study and during the interpretation of the research data.

Knowles' andragogical model

The scholarly interest in the particularities of adult learning can be attributed to the early works of Thorndike, Bregman, Tilton, and Woodyards (1928), which stated that “the questions that framed much of the early research on adult learning was whether or not adults *could* learn” (Merriam, 2001a, p. 3). Perhaps some of the better known principles of adult learning are those associated with andragogy, which can be contrasted from pedagogy by the use of the Greek root *andra* to mean adult rather than the root *peda* to mean child. The origin of the term andragogy has been traced back to 1833 but it remained rather obscure until it was popularised by Knowles in 1968 (Knowles et al., 2005). In his andragogical model, Knowles initially proposed four assumptions about the adult learner (Knowles, 1975, 1977, 1978, 1980) and two more assumptions were added in latter publications (Knowles, 1984a, 1984b, 1989, 1990). These assumptions were “designed as a way of helping adult educators to develop the ‘art and science’ of teaching adults” (Long, 2004, p. 21) and can be summarised as follows:

1. *The need to know.* Adults need to know why they need to learn something before undertaking to learn it.
2. *The learners' self-concept.* Adults have a self-concept of being responsible for their own decision, for their own lives.
3. *The role of the learners' experiences.* Adults come into an educational activity with both a greater volume and a different quality of experience from that of youths.

4. *Readiness to learn.* Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations.
5. *Orientation to learning.* In contrast to children's and youth's subject-centered orientation to learning (at least in school), adults are life-centered (or task-centered or problem-centered) in their orientation to learning.
6. *Motivation.* Adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), but the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life, and the like) (Knowles et al., 2005, p. 64-68).

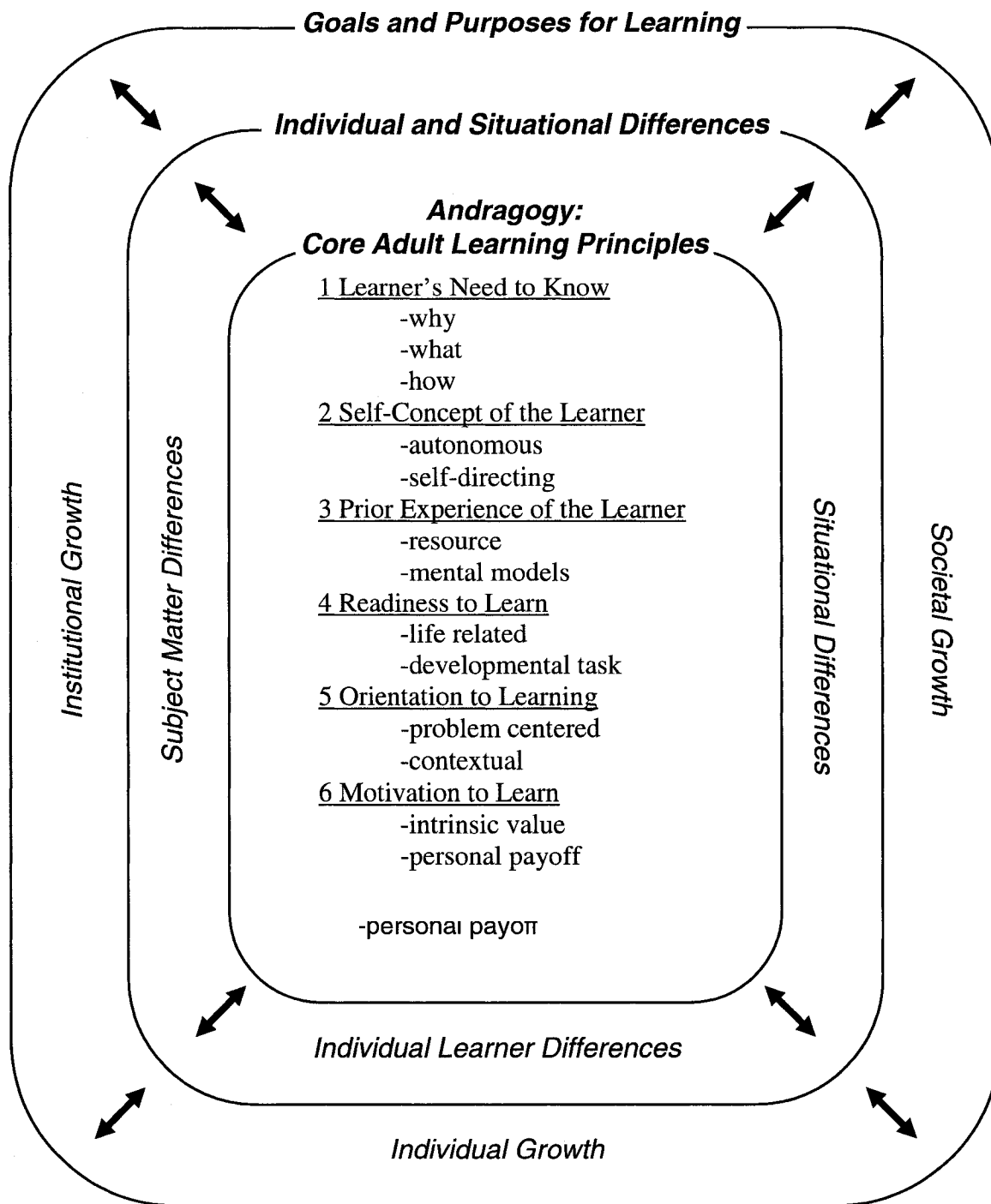
Knowles et al. (2005) created a three ring model titled *Andragogy in practice* (figure 1). They placed the six andragogy assumptions at the center of their model as the *Core adult learning principles*. Then to emphasise the flexible application of the assumptions and their link to the individual learner and society, they added *Individual and situational differences* in the second ring and *Goals and purposes for learning* in the third ring.

According to Field (2006), Knowles and many others in the realm of education, such as Eastmond (1991), Levinson (1996), and Sheehy (1976), have drawn heavily on life cycle theory in their writings. Field stated that this stage-based approach to explain adult learning undermines the current discussions on lifelong learning. Since lifelong learning occurs anywhere, anyplace, and with anyone, Field argued that "if Knowles' concept of andragogy provided a comforting theoretical underpinning for the idea of a specialised adult education profession, the idea of lifelong learning shatters the role of supporting learners into a thousand fragments" (p. 22). Many scholars in the field of education have questioned whether Knowles' "theory" or "group of

Figure 1

ANDRAGOGY IN PRACTICE

(Knowles, Holton, & Swanson, 1998)



Reproduced with permission from Elsevier, (Knowles, Holton III, & Swanson, 2005, p. 4).

assumptions” have merit; some state that they are not empirically supported and are merely a description of the adult learner (Merriam et al., 2007). Brookfield (1986) has challenged the notion of a theory of andragogy, arguing that statements such as “adults are self-directed” cannot form a theoretical foundation but rather represents a desired outcome of education. In this line of thought, Long (2004) affirmed that Knowles encouraged an idealistic notion of the adult learner and that he adhered to a

Super learner idea ... specifically describ[ing] adult learners as being self-directing, as deriving only positive benefits from experience, as possessing great readiness to learn, as voluntarily entering educational activity with a life-centered, task-centered, or problem-centered orientation to learning, and as being internally motivated (p. 23).

In support of Knowles’ work, Wautier and Vileyn (2004) argued that andragogy is not an all or nothing ideology and suggested it should be viewed as a system of elements that could be adopted individually or as a whole, depending on the situation. In fact, it is the flexibility of the andragogical model that formed the cornerstone of Knowles’ arguments throughout his writings (Knowles et al., 2005). Merriam (2001b) explained that Knowles’ model is part of the foundational writings that have stimulated meaningful discussion toward new understandings of adult learning. As such, Knowles’ assumptions are often applied today in various adult learning events.

Andragogy and continuing education in healthcare

In the context of continuing education for healthcare providers, Knowles’ androgogical principles are relevant for many aspects of healthcare providers’ learning needs. The following examples show how self-direction and construction of knowledge in relation to real world situations are valued in healthcare. We also see how healthcare providers are expected to self-

motivate and participate in continuing education activities to enhance their clinical decision-making skills. Finally, the examples show that healthcare providers must constantly assess their own level of knowledge and skills to guide their learning process.

In her review of the literature on the learning needs of nurses and on the value of different types of technological support that are available to sustain continuing education programs, Goertz Koerner (2003) proposed that the evolution of nursing mastery has moved towards self-directed, lifelong learning. She stated that nursing mastery is necessary to respond to a healthcare system that is calling for increased patient-focused care. She further explained that patient-focused care required increased clinical reasoning skills¹⁹ for nurses and other healthcare providers to be able to offer such flexible and individualised care. As part of the self-directed approach to learning, Goertz Koerner argued that continuing education programs had to focus on problems that occurred in the workplace and emanated from the learners' lived experiences to facilitate clinical reasoning processes. Although interesting, Goertz Koerner's views are limited to the profession of nursing and cannot be readily applied to other healthcare providers who face differing workplace realities. Furthermore, her views are not based on an in-depth review of the literature, which compromises the strength of her accounts.

In his writings, Daley (2003) suggested that healthcare providers learn through an iterative process by which professionals go back and forth between new concepts and practice in an attempt to construct new knowledge and understandings relevant to the workplace. Lockyer et al. (2005) supported this view, and conducted a study with 404 physicians to examine the congruence between a continuing education course's objectives and resulting practice changes.

¹⁹ Clinical reasoning represents the driving element of professional practice in healthcare and can be defined as the use of knowledge within cognitive or metacognitive processes that serve to make informed clinical decisions and guide clinical practice (Higgs & Titchen, 2000).

The investigators conducted a qualitative analysis of the commitment to change statements (CTC) made by the physicians prior to participating in the course, at the end of the course, and three months after the course was completed. The data showed that CTC statements changed between the beginning and the end of the course and that the revised CTC were not always implemented (75%) or became irrelevant with time. The investigators gleaned that physicians compared their current practices with the information obtained in their continuing education program in an effort to achieve a certain level of understanding of the presented concepts. This resulted in a refinement or a redirection in the CTC during the course or after the course was completed. The physicians' interpretation of what they thought they would learn in the course and thus be able to change in their practice was therefore not a reliable source of information for the educators prior to the start of the course. For this reason, Lockyer and colleagues found it very difficult to plan for and anticipate the learning that would occur during their learning event. They posited

It is almost impossible for course designers to fully understand the learning that went on before the course, goes on or is triggered during the course, or occurs after the course because chance conversations, patient issues, and even changes in policies and procedures facilitate learning and change (p. 77).

The investigators concluded that learning was influenced by unanticipated supportive conditions in the workplace and in the physicians' daily lives while the course was being offered and that these conditions could not be easily mediated by educators. This conclusion can be questioned because the investigators focused on the physicians' written statements and inferred assumptions about the influence of the learners' social environment on their learning process and practices without verifying these assumptions.

Complementing views of adult learning

Although Goertz Koerner's (2003) and Daley's (2003) writings, and Lockyer et al.'s (2005) study support the importance of self-directed learning, use of constructed knowledge, application of learned concepts in the workplace, learning closely related to social roles, self motivation to learn, and understanding about why something should be learned, they have also tapped into other issues of adult learning not directly covered by Knowles' six principles of andragogy. When the authors speak of the link between events that occur in the learners' environment and the application of constructed knowledge, skills, and attitudes, they refer to something different than Knowles' assumptions. These reported observations could be associated with the concepts of incidental learning or implicit learning, as well as situated cognition.

Marsick and Watkins (2001) described a type of learning they termed incidental. Marsick and Watkins explained that "when people learn incidentally, their learning may be taken for granted, tacit²⁰, or unconscious. However, a passing insight can then be probed and intentionally explored" (p. 26). Eraut (2000) defined a similar type of learning that he named implicit learning. Implicit learning is the independent construction of knowledge without "conscious attempts to learn and in the absence of explicit knowledge about what is learned" (p. 115). Eraut construed that it was the use of tacit knowledge for performance in daily activities that was a precursor to implicit learning. For Eraut, tacit knowledge was not learning per se but resulted from an accumulation of lived experiences in long-term memory that could be used for implicit learning. Regardless of the nomenclature used, the types of learning described here (incidental or implicit) influence ways of "knowing" in adult learning. Accordingly, learning cannot be directly

²⁰ "Tacit knowledge is practical know-how that is usually not directly taught or even openly expressed or stated. It is the kind of knowledge one acquires on the job or in everyday kinds of situations, rather than through formal instruction" (Torff & Sternberg, 1998, p. 116).

attributed to a learning event but is distributed between lived experiences within a learning event and peripheral to the learning event. This may account for Lockyer et al.'s (2005) difficulty with formerly assessing and planning the outcomes of educational programs in advance, because there were always unanticipated outcomes.

The premise that learning cannot be separated from the situation in which it occurs is termed "situated learning" (Merriam et al., 2007). Although this is a complex concept, it is important to examine a few of the principles because some were considered during this study. Authors who have been instrumental in developing the precepts of situated learning include Rogoff (1990), Lave and Wenger (1991), and Kirshner and Whitson (1997). Situated learning builds on the ideas of Vygotsky's sociocultural theory (1978) where learning is viewed as being social in nature (Cheren, 2002). For Hansman (2001), "The nature of the interactions among learners, the tools they use within these interactions, the activity itself, and the social context in which the activity takes place shape learning" (p. 45). Thus the learner, the learning environment, the learning group, and the learning workshop are so closely linked that they are inseparable and are part of a system that enables collective meaning-making to occur. Taylor and Blunt (2001) contended that the process of situated learning

Means involving other learners, the environment, and the context ... to create meaning in that learners construct their own knowledge from the materials of their experience.

Meaning is derived from a learner's relations with others and through instructional activities such as environmental cues and the social organization that a community of learners develops (§ 8).

This view of adult learning differs from Knowles' assumptions in that Taylor and Blunt focus is placed on the group of learners and the environment in which the learning occurs rather than on

the individual. Situated learning offers some explanation as to why Goertz Koerner (2003), Daley (2003), Lockyer et al. (2005) all commented on an expressed link between the meanings that are constructed during continuing education programs and the environment in which knowledge, skills, attitudes, and practices are applied. Situated learning, therefore, is important in the context of continuing education in healthcare.

Conclusion on the Chosen Principles of Adult Learning

The workshop planned for this study took into consideration the principles of adult learning presented here, but focused primarily on the six assumptions of andragogy presented by Knowles et al. (2005). Specifically the workshop was designed to allow the learners to direct their own learning while it also took in consideration that the concepts covered were relatively new and complex. Therefore, some guidance was built into the design to ease the learners into the learning process. Moreover, the concepts of CPCP and IECPCP were presented in a way that recognised the learners' individual levels of knowledge, provided examples of how the content could be applied in the workplace, and encouraged learners to reflect on the link between the content and their own work situations. The workshop design also acknowledged the influence of incidental learning or implicit learning. The workshop thus invited learners to recall and share lived experiences and encouraged learners to tap into their constructed tacit knowledge base to solve the presented case studies or the problems brought forth by the learners.

ELearning in Healthcare

Defining ELearning and Relevant Concepts

Because the focus of this study was to examine eLearning as a means of providing an IECPCP continuing education workshop in healthcare, it is imperative to first define this technological approach to learning. The term eLearning was attributed in 1998 to Jay Cross,

founder of the Internet Time Group (Mason & Rennie, 2006). ELearning stands for electronic learning and refers to a vast array of information and communication technology applications and processes designed specifically for teaching, such as satellite broadcast, television, radio, computers, the Internet, digital networks, DVDs, and CD-ROMs.

In her report to the Canadian Council on Learning (CCL), Fournier (2006) advanced that there were a multitude of definitions for eLearning and that, in essence, it “is an approach that facilitates and enhances learning through both computers and communications technology”(p. 6). Though Fournier’s statement offers a reductionist view of eLearning by not qualifying how learning is facilitated or enhanced through the use of electronic technologies, it does highlight the need for communications technologies. The following key definitions of eLearning offer a more comprehensive view of eLearning. In his report to the CCL, Rossiter (2005) defined eLearning as “the development of knowledge and skills through the use of information and communication technologies (ICTs) to support interactions for learning – interactions with content, with learning activities and tools, and with other people” (p. 5). Rossiter’s definition is inclusive of different types of electronic technologies and implies that there are layers of interactions involved in an eLearning environment. For Bowles (2004), “electronic learning can be defined as a learning experience involving the acquisition or transfer of knowledge delivered or transacted through electronic means” (p. 19). Bowles’ definition is simple to understand and clearly acknowledges that there are a multitude of applicable electronic technologies, yet it does not explicitly convey the notion of learning interactions that are central to eLearning. Rosenberg (2001) offers another definition of eLearning which is complemented by a set of criteria:

E-learning refers to the use of the Internet technologies to deliver a broad array of solutions that enhance knowledge and performance. It is based upon three fundamental criteria:

1. It is networked, which makes it capable of instant updating, storage/retrieval, distribution and sharing of instructions or information.
2. It is delivered to the end-user via a computer using standard Internet technology.
3. It focuses on the broadest view of learning – learning solutions that go beyond the traditional paradigms of training (p. 28).

Rosenberg's definition is frequently cited, yet it is exclusive to Internet applications for learning and does not recognise other types of electronic technologies such as educational software.

Not only are eLearning definitions prevalent, a scan of the literature revealed a wide variety of terms used in connection to learning through the use of technologies. Some of the more commonly used expressions include: distance learning (Tatterstall, Waterink, Höppener, & Koper, 2006), distributed learning (Dornisch & Land, 2002), online learning (Hacker & Niederhauser, 2000), web-based learning (Khan, 2001), computer-based learning (Narciss & Huth, 2006), open learning (Bates, 1999), flexible learning (Hill, 2006), and m-learning (Motiwalla, 2007). More recently, blended learning has received increased attention and some authors have suggested that it is a more relevant term than eLearning (Singh, 2003). Although many authors equated blended learning to a hybrid or a combination of f2f and eLearning, others proposed that blended learning implies the judicious choice of geographical location of learning, technological applications, theoretical foundations, communication strategies, and pedagogical

approaches (Bellefeuille, 2006; Dalsgaard & Godsk, 2007; Stubbs, Martin, & Endlar, 2006).

According to Elsenheimer (2006)

Blended learning is an approach to instructional design that seeks to maximise learning potential by applying the most effective form of instruction for a given program element.

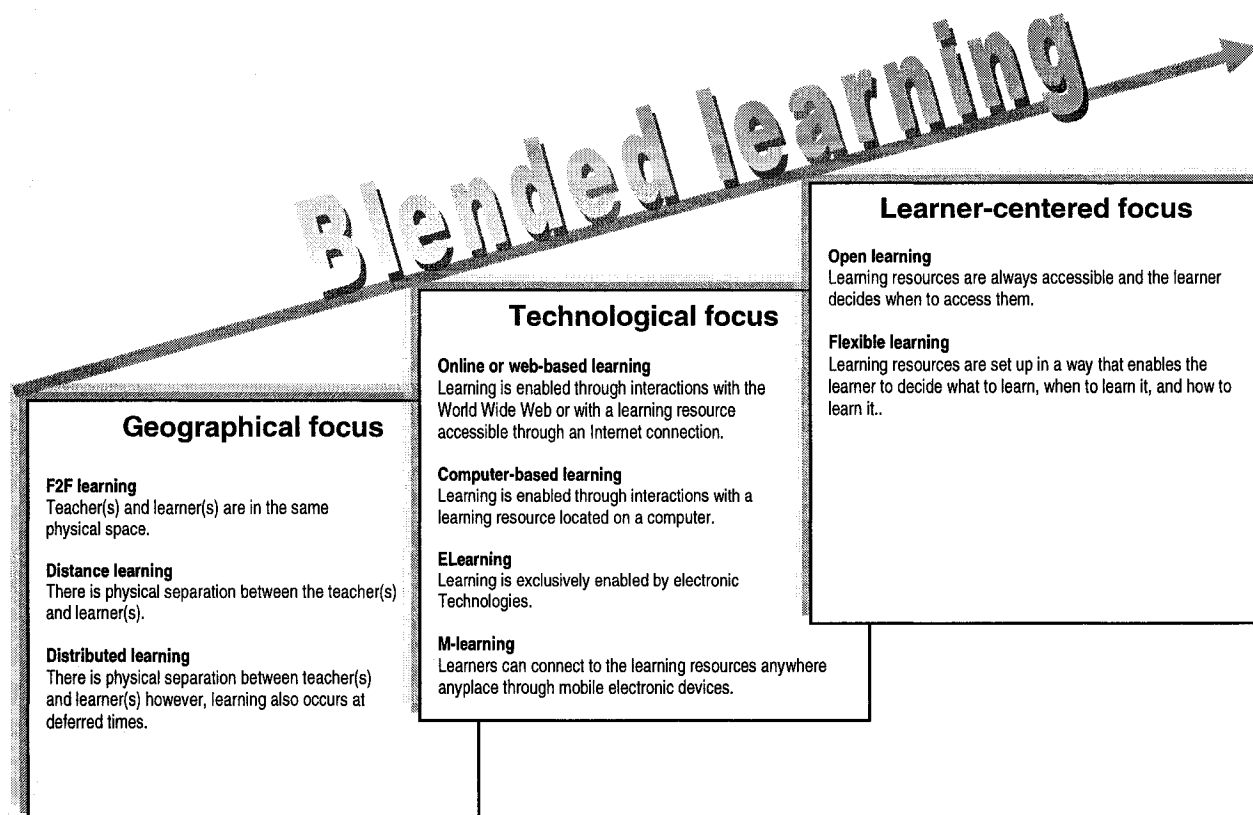
The term *blended learning* should not refer to just the mixing of training delivery methods (as it is often defined) but to the orchestrated application and integration of instruction, tools, performance support, collaboration, practice, and evaluation to create a unified learning and performance environment (p. 26).

There seems to be as many recommended elements to blend as there are writings on the topic of blended learning. For example, Graham and Dziuban (2008) spoke of combining different web-based technologies, pedagogical approaches, modes of training (f2f and online) and learning activities (didactic and work-related), whereas Kerres and De Witt (2003) suggested mixing “didactical methods (expository presentations, discovery learning, cooperative learning, etc.); and delivery formats (personal communication, publishing, broadcasting, etc.)” (p. 103).

Based on his ongoing doctoral work at Memorial University in Newfoundland, Kerr (2007) proposed that an appropriate blend considered media choices (interactive animations, text, etc.), temporal issues (self-paced learning, scheduled activities, etc.), pedagogical strategies (case-based, experiential, etc.), curricular information (content, concepts, etc.), institutional factors (inter-departmental, inter-university, etc.), cultural elements (different student populations, different cultural groups, etc.), and program particularities (undergraduate, graduate, etc.). Kerr further suggested that terms applied to the use of technologies for teaching and learning could be grouped according to the geographical, technological, and learner-centered focus they conveyed in their meaning. He then proposed that a blended approach to learning

incorporate an appropriate combination of each of the three foci within a learning resource (figure 2).

Figure 2: Situating blended learning



Within a learning resource, a blended approach to learning incorporates an appropriate combination of each of the three following foci: geographical, technological, and learner-centered. Adapted from Kerr (2007).

While supporters of a blended learning approach expressed that this term supersedes all other terms related to learning with technologies (Thorne, 2003), others have pointed out that blended learning does not bring anything new to the field of education. Zukowski (2006) asked, “Haven’t we all been doing this for most of our educational careers?” (p. 82). For Oliver and Trigwell (2005), “the breadth of interpretations means that almost anything can be seen as blended learning, and consequently that use of the term does not help us to understand what is being discussed” (p. 18). Similarly, Mason and Rennie (2006) explained that

In reality, any course or even any learning experience almost inevitably involves a combination of different inputs: reading, thinking, writing and talking to peers or tutors. Consequently, as the use of the term widens, it becomes less and less useful as a descriptor (p. 12).

Because it is difficult to understand what is being studied when using the term blended learning, I opted to use the term eLearning keeping in mind that the workshop was also an example of distributed and flexible learning (see figure 2). I have retained Rossiter's (2005) definition of eLearning as it reflects the central role interactions and electronic technologies play in eLearning. Consequently, using the term eLearning clearly conveys that electronic technologies were used for the development of the IECPCP continuing education workshop. To be more precise, the workshop design focused on ICTs that enabled online learning to occur. Therefore online learning and eLearning may be used interchangeably throughout the text, and the philosophical underpinnings of a blended learning approach were also applied.

eLearning and continuing education

I have already established that to maintain competence, healthcare providers are expected to participate in continuing education programs once they enter the workforce. One of the motivators is that professional colleges monitor participation as a means of sustaining a competent workforce and ascertaining quality of care. To improve accessibility, the number of continuing education programs offered through eLearning has increased significantly since the mid-1990s (Olsen & Shershneva, 2004). According to Olsen and Shershneva, the purpose of these online educational programs "include[s] dissemination of knowledge, changing behaviour, or raising the visibility and stature of the institution or program" (p. 107). For example, it may be beneficial (sometimes financially) for a healthcare institution, organisation or agency to report

that their staff is trained in a specific technique. This holds particularly true for physicians who may be using a leading approach to care as a result of their participation in an online post-licensure continuing education program. In Goertz Koerner's (2003) opinion, "Organizational leaders who integrate e-learning technology and practice into their culture and performance will maintain the competitive advantage in the 21st century, becoming the employer of choice" (p. 16). With such importance placed on continuing education, learners, educators, managers, and policy-makers have been concerned with the efficiency and effectiveness of eLearning for the continued training of post-licensure healthcare providers.

Efficiency and effectiveness of eLearning for continuing education

While some studies have shown that eLearning was cost-effective and convenient for healthcare providers (Kemper et al., 2002; Maki & Maki, 2000), few studies have shown clear advantages of eLearning continuing education programs as measured through outcomes achieved by learners (Casebeer et al., 2004; Duñet & Reyes, 2006). Accordingly, Wutoh et al. (2004) were interested in finding out if online continuing education programs and in particular continuing medical education (CME)²¹, were "effective in changing behaviour to ensure provision of the latest standards of care" (p. 21). They conducted a systematic review of the literature and included only quantitative studies (randomised controlled trials, meta-analyses, and pre/post studies on intervention). Their selection criteria significantly limited the breadth of their systematic review and avoided any findings that could have shed light as to why they found the result that they did or could have provided an alternate perspective. In fact, of the 86 studies found, only 16 studies met the inclusion criteria. Nevertheless, the investigators found that online learning was just as effective as other traditional means (e.g., print-based and didactic) for

²¹ Continuing medical education is specific to the ongoing education of physicians and surgeons. Many of the writings on continuing education for healthcare providers focus on CME, therefore some citations will use the acronym CME.

knowledge construction by learners. Regarding changes in practice, three studies reported that healthcare providers had changed their behaviour following their participation in an online educational program while another study showed that change in behaviour had not been sustained after four months. The investigators questioned why the online programs included in their systematic review had not been shown to stimulate sustainable changes in behaviour. They hypothesised that “it is possible that as Internet-based CME programs apply the same curricula as traditional formats of CME, they apply the same deficiencies, rendering both programs ineffective” (p. 28). Consequently, the investigators recommended that educators focus on learner-centered designs.

Other meta-analyses in the field of eLearning have demonstrated that there is a strong body of evidence that shows that this approach to education is at least as efficient as f2f teaching in terms of knowledge gains (Allen, Bourhis, Burrell, & Marbry, 2002; Chumley-Jones, Dobbie, & Alford, 2002). However, as noted by Wutoh et al. (2004), the appeal of eLearning is not in reproducing f2f educational programs but rather in the exploitation of different pedagogical approaches within the online environment. According to Ruiz, Mintzer, and Leipzig (2006), “Advantages in learning enhancement are a less well recognised but potentially more revolutionary aspect of e-learning than are those related to learning delivery ... Learning enhancements permits greater learner interactivity and promotes learners’ efficiency, motivation, cognitive effectiveness, and flexibility of learning style” (p. 208). Following their literature review of online continuing education programs for the health professions, Manning and DeBakey (2001) reported that for now, the main advantage of eLearning seems to be accessibility. They emphasised that the role of online continuing education should be to offer learning opportunities devised specifically in response to healthcare providers’ self-identified

learning needs. They also explained that over the years, the goals of continuing education have changed from knowledge uptake, to knowledge construction and the application of developing concepts, and they suggested that eLearning programs need to be designed to reflect this change. They posited that in order to differentiate themselves from f2f programs, online continuing education programs “should be highly self-directed, with content, learning methods, and learning resources selected specifically to maintain or improve the knowledge, skills, and attitudes needed daily in clinical practice” (p. 47).

Is eLearning efficient and effective for continuing education in healthcare? Currently, we know that eLearning can be cost-effective because healthcare providers don't need to be replaced in the workplace while they attend online continuing education programs, and because eLearning increases accessibility to continuing education programs. We also know that eLearning can lead to construction of knowledge, although the extended development and applicability of that knowledge needs further investigation as is the case for the continuing education field as a whole. The ability of eLearning to stimulate changes in healthcare providers' behaviours also warrants more investigation. Therefore, further research needs to be conducted on the application of different andragogical approaches to eLearning and the outcomes healthcare providers achieve as a result of their participation in these innovative programs. This is the area of interest for this study.

Importance of interaction opportunities in eLearning

To innovate in eLearning, authors have suggested that it is important to take advantage of the variety of interaction opportunities that are offered in this approach to learning (Ducreux & de Gromard, 2002; Gunawardena, Lowe, & Anderson, 1997). In an online environment, not only are interactions possible with other learners, with facilitators, and with the virtual learning

environment itself, interactions can also take place in real time through synchronous communications such as chat rooms, instant messaging, netcasting or in differed time through asynchronous communications such as emails²², blogs²³, threaded discussions²⁴, and wikis²⁵. According to McPherson and Nunes (2004), the multitude of possibilities to interact “liberate educational delivery from the constraints of time and distance. CMC [computer mediated communication] is supposed to promote self-discipline and requires learners to take more responsibility for their own learning” (p. 84). Bento and Schuster (2003) added that through their online interactions, learners are exposed to multiple perspectives on various issues and are allowed “to adapt, process, and filter content into their own logical frameworks, resulting in outcomes that may not be thoroughly predictable” (p. 158). This leads to learning that is centered on the learners’ needs and that recognises the dynamic nature of the knowledge, skills, and attitudes that need to be developed by healthcare providers. Therefore, eLearning should not be considered to be a replacement for or an adjunct to f2f learning; instead, these two methods should be considered to be different modes of learning that can be complementary. This is supported by Bunker and Vardi’s (2001) study. They were interested in exploring why educators would choose to incorporate online interaction opportunities in their learning programs when the students’ ability to access f2f education was not an issue. Bunker and Vardi conducted five semi-structured interviews with lecturers at the same university who opted to incorporate eLearning in their programs. The lecturers included in their study perceived that the use of eLearning tools improved students’ access to recent information, increased the quality and the amount of

²² Email: Messages sent and received electronically through an email system (Merriam-Webster online Dictionary, 2008).

²³ Blog: A website that contains an online personal journal with reflections, comments, and often hyperlinks provided by the writer (Merriam-Webster online Dictionary, 2008).

²⁴ Threaded discussion: A form of electronic conferencing which functions like an electronic bulletin board (Technology Enriched Learning, 2002).

²⁵ Wiki: A website or similar online resource which allows users to add and edit content collectively (Multiplatform Glossary, 2008)

interactions between students, and increased the students' autonomy in their own learning. The results presented by Bunker and Vardi are limited to one site and to professors who were rated excellent lecturers by students. These factors limit the ability to transfer the findings to other settings.

There are some particularities of education in healthcare that need to be taken into account when planning for online interactions. In her case report of an online nurse practitioner program offered in Newfoundland, Bolan (2003) advised that asynchronous activities were preferable to synchronous communications to stimulate reflection in learners. This is supported by other writings in the field of eLearning (Berge, 1999; Burge, 2007; Burge & Roberts, 1998). Still, to maintain learner motivation, Bolan found that she needed to balance her approach to online learning by incorporating some synchronous activities at scheduled milestones during the program. She did advise, however, that programs keep synchronous interactions to a minimum to facilitate the integration of the learning activities within the learners' work schedules and life engagements, and to decrease attrition rates.

Factors that influence participation in eLearning

Authors have cautioned that participation in a virtual environment can be difficult to stimulate (Bichelmeyer, Misanchuk, & Malopinsky, 2001; Gabriel & MacDonald, 2002). Learners have diverse academic backgrounds, personal goals, learning styles, and time commitments. Unless specifically addressed in the course design, these variations influence the learners' ability and desire to participate. ELearning also presents technical barriers to participation, such as low-level Internet proficiency, firewalls, and slow Internet speed. Although these obstacles are said to be overcome through diligent planning and appropriate design (Selim, 2003), that is not always the case. For example, Parker, Riza, Tierney, and Barrett (2005)

examined the experience of 42 Master's students who participated in an online nurse educator program. Although the program organizers included a team of trained Internet support personnel and facilitators who were technically savvy in their program's design, they found that many students experienced unanticipated access problems. For one student, the support team wasn't able to resolve the problem and this student abandoned the program. For two other students, some functionalities of the website, such as their ability to post messages, did not work when they tried to access the website from a remote computer different from their usual personal computer. Library link problems were also frequent and were a source of frustration for the learners. The investigators found that even though they had attempted to provide timely access to technical support, the technical problems experienced by the students had a direct impact on attrition rates, the desire to participate, and the level of satisfaction with the learning program.

Another study conducted in six long-term care facilities located in Alberta, Ontario and New Brunswick evaluated an eLearning dementia care program aimed at enabling healthcare teams to deliver better service to residents with dementia (MacDonald, Stodel, & Casimiro, 2004, 2006). Of the 85 healthcare providers who were registered in the eLearning workshops, 22 abandoned the program. The site coordinators who were responsible for overseeing learner participation and offer onsite support explained that all of the learners who had experienced significant technical difficulties such as access, software, and navigation problems, had stopped participating. The authors commented that even though the workshops were tested prior to their launch, the technical problems identified during testing had not all been resolved and deterred some learners from participating in the workshop activities. Onsite technical support did not seem sufficient to enable participation for those learners who had experienced technical

difficulties. Therefore, the authors concluded that eLearning programs should be carefully assessed and all anticipated technical difficulties resolved prior to offering an online workshop.

Sound arguments for the introduction of eLearning in the context of continuing education in healthcare have been exposed. As Klassen and Vogel (2003) stated

The social aspect of online learning is changing the experience of students, but the advantages may be equally satisfying. For example, connections with people, though virtual, may actually increase, as they discover new communities with shared interests that were previously inaccessible to them (p. 42).

This said, healthcare providers don't necessarily embrace learning as a means to engage in continuing education programs with as much enthusiasm as do educators (Nocente & Kanuka, 2002). Sargeant et al. (2004) wanted to understand why they were experiencing low registration rates in their online continuing education program for physicians in Nova Scotia, Newfoundland, and British Columbia. The investigators conducted a case study comprising eight focus group totalling 35 participants and seven individual interviews. Participants who did not use the online program explained they had no need because they could attend comparable f2f programs. For those who used the online program, it was the self-paced attribute that appealed to them although an equal number preferred a more structured approach similar to what they had experienced in f2f programs. Some physicians felt that online learning provided opportunity for reflection through asynchronous discussions, but again, an equal number preferred the instantaneous response offered by f2f contact. Physicians who were more experienced with online learning seemed to take advantage of all aspects of the website. They used the communication tools, accessed the different sources of information and interacted with other learners. They also expressed a more positive view of eLearning. Some physicians questioned the possibility of

achieving social comfort in a virtual learning environment, although all of the physicians agreed that facilitation was important to increase their level of social comfort. The results of Sargeant et al.'s (2004) study spanned three Canadian provinces and provided a thorough description of the online experience of physicians. The results indicated that physicians needed time to develop the necessary skills before they could tap into the full potential of an eLearning experience. The investigators offered few reasons why there was such a range of experiences between physicians within the same online environment. In addition, there was no mention about how these findings could relate to others groups of healthcare professionals.

Desjardins (2005) theorised about the experiences of online learners and developed an information and communications technology model. This model presents four levels of competencies that learners must develop to function within a technological environment. According to Desjardins, learners need to develop technical competencies (how to manipulate the mouse, work with different software, etc.), social competencies (how to use different communication technologies, knowledge of Internet etiquette, etc.), information competencies (how to conduct an Internet search, sift through information found, etc.), and epistemological competencies (how to construct knowledge by manipulating online data, use the technology to solve problems, etc.). Desjardins' model is centered on the learner and fails to present the elements of the learning resource and the environmental conditions that need to be in place to facilitate functioning within the online environment. This said, Desjardins' model does imply a steep learning curve involved in developing the necessary competencies for online learning. Stodel, Thompson, and MacDonald (2006) concurred with Desjardins' views when they stated, "Online learning is a fundamentally new learning experience. Just as educators need to learn how to teach online, learners need to learn how to learn online" (p. 18).

In summary, participation in online learning activities needs to be nurtured if healthcare providers are to develop the competencies they require to fully engage as online learners.

Participation must therefore be addressed at each step of the design, development, delivery, and evaluation of the learning workshop.

ELearning from a Constructivist and Socioconstructivist Perspective

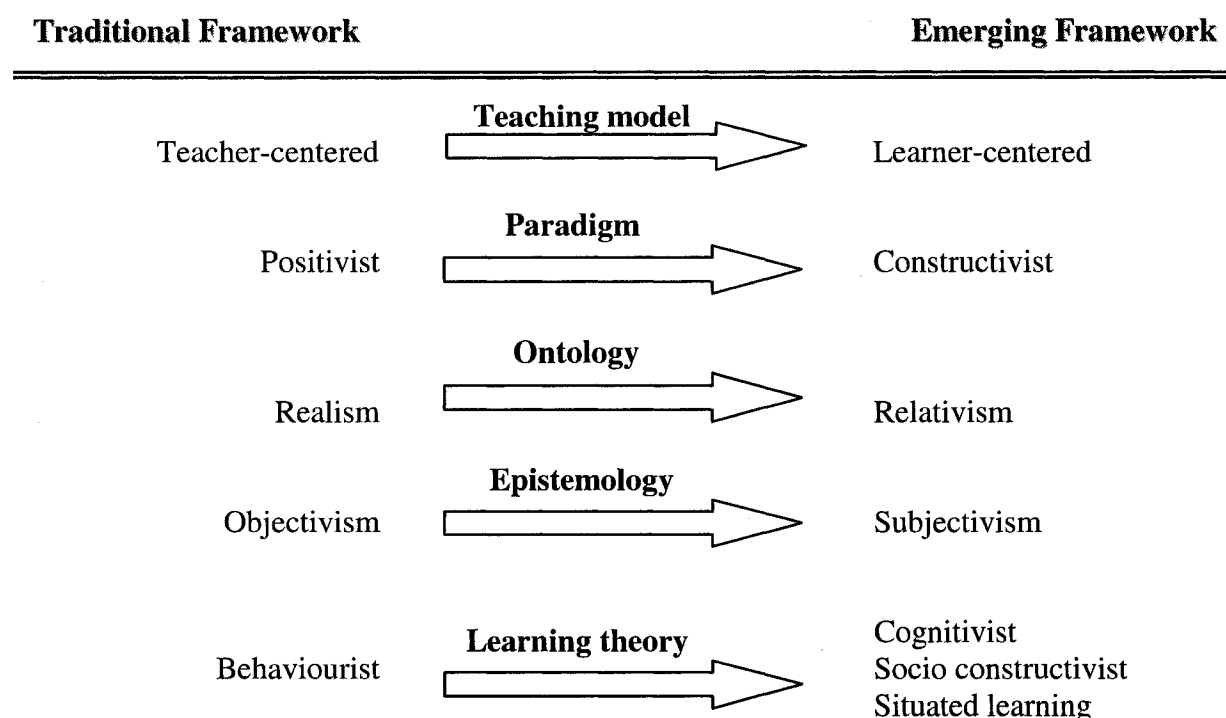
Understanding how learners construct and develop knowledge in an online environment has been supported by various existing learning theories²⁶, but true eLearning epistemology²⁷ is still evolving (Knowlton, 2000). While the characteristics of technology can overpower the design process, Jonassen, Howland, Moore, and Marra (2003) argued that eLearning design, development, delivery, and evaluation must focus on sound pedagogical and androgogical principles. ELearning programs have initially relied on more pervasive behaviourist²⁸ teaching strategies. The unique opportunities for interactions in eLearning environments have served as a catalyst to move toward constructivism (Kanuka, 2002; Lankshear, Peters, & Knobel 2000) (figure 3). Mason and Rennie (2006) stated, “It is perhaps too early to talk about an underlying theory to which the majority of researchers would subscribe. Nevertheless, constructivism does seem to be the approach most commonly evident in eLearning courses” (p. xviii).

²⁶ Learning theories are systematic and integrated understandings of how humans interact and function in their environment and they are used to guide teaching activities (Nulden, 2001).

²⁷ Epistemology is “the study of the nature of knowledge and justification” (Schwandt, 2007, p. 87)

²⁸ Behaviourist ideology holds three basic assumptions on the process of learning. First, observable behaviour rather than internal thought is the focus of learning, second, the environment shapes behaviour rather than the individual learner, and third a change in behaviour is determined by how close in time the learning events are and by the reinforcement that is provided (Merriam et al., 2007).

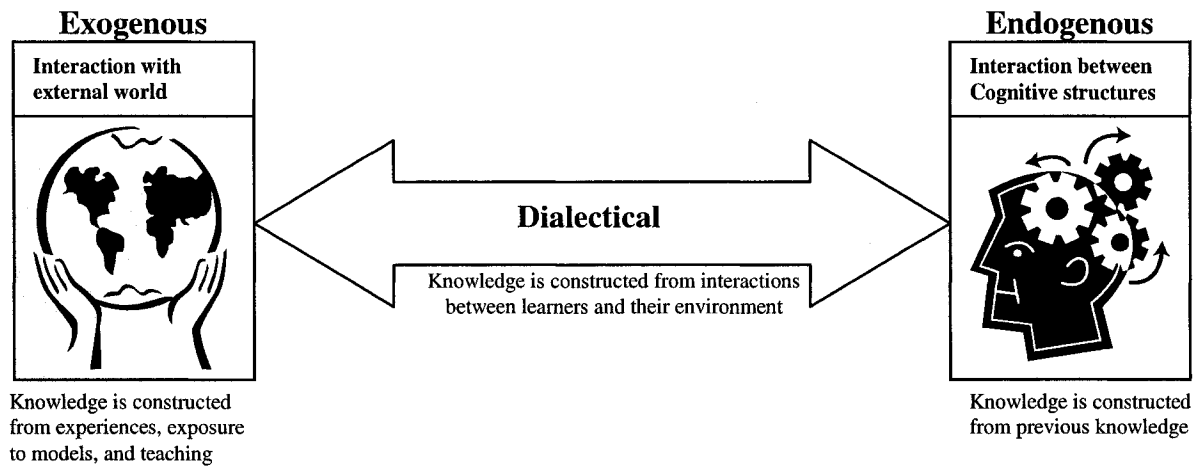
Figure 3: Emerging framework for eLearning



Although eLearning has no universally recognised epistemology, an emerging theoretical framework is serving as a catalyst for change in teaching and learning. Original figure based on the writings of Guba (1990), Knowlton (2000), Lincoln & Guba (2000), and Nulden (2001).

From an epistemological standpoint, there are different views of constructivism. Schunk (2004) proposed three types of constructivism based on the role that interactions play in the construction of knowledge. Schunk's typology places exogenous constructivism and endogenous constructivism at either extreme of a continuum, where exogenous implies that "knowledge represents a reconstruction of structures that exist in the external world" (p. 288) and endogenous entails that "mental structures are created out of earlier structures, not directly from environmental information" (p. 288). Schunk then placed dialectical constructivism in the middle and posited that in this case "constructions are not invariably bound to the external world nor are they wholly the result of the workings of the mind" (p. 289) (figure 4).

Figure 4: Tripart typology of constructivism



Original figure based on the writings of Schunk (2000, 2004)

Merriam et al. (2007) explained that beyond the debate of the individual (endogenous) versus the external (exogenous) and other differences between proponents of constructivism, there is a common thread: “Basically, a constructivist stance maintains that learning is a process of constructing meaning; it is how people make sense of their experience” (p. 291).

Because healthcare providers need to develop relevant, real-world problem solving skills, as well as learn to consider multiple perspectives and to negotiate personal meaning from their experiences, Mann (2004) suggested that continuing education programs should consider a constructivist approach to teaching and learning. Similarly, Burniske and Monke (2001) recommended constructivist principles be considered for eLearning to provide authentic learning opportunities and respond to workplace demands. For Mason and Rennie (2006), “the aim of constructivist principles as applied to elearning is to engender independent, self-reliant learners who have the confidence and skill to use a range of strategies to construct their own knowledge” (p. xviii). In the context of an online IECPCP workshop, the purpose of adopting a constructivist approach is to take advantage of eLearning tools to stimulate interactions and cognitive

processes, social encounters, and attitudinal states necessary for the active construction of knowledge about CPCP.

Considering the advantages of a constructivist approach for the design, development, delivery, and evaluation of an IECPCP eLearning workshop, it was important to delve deeper into the theories linked to this paradigm as the theories vary in the principles they propose. Because the online environment provides a social context for learning, I continued to search for a “socio” constructivist theory that corresponded with the research questions of this study. Socioconstructivist theories are situated at the dialectical section of the continuum in figure 4 and place increased importance on the interactions between learners and interactions with the learning environment to explain the construction of knowledge (Dirkx, 2001; Merriam et al., 2007). From a socioconstructivist perspective, learners create meaning from experience through interactions with other learners and with their learning environment. Socioconstructivism therefore aligns well with the interaction opportunities offered by eLearning tools and with the goal of IECPCP, which is to improve collaboration. Again, socioconstructivist theories vary in the principles they uphold. One of the main differences is whether socially mediated learning can be considered to “take place in individuals’ minds or ... take place as a social, participatory process” (Salomon & Perkins, 1998, p. 3). According to the first view, interaction in a social system enhances a learner’s cognitive function, thus enhancing the attainment of learning outcomes; whereas, according to the second view, the learner and the social system are a “unified learning system”. Within the “unified learning system”, successful participation becomes the key learning outcome shared by all learners. Although in both cases learning occurs through social interactions, the dichotomy here is whether the socially constructed knowledge belongs to and is specific to the *individual learner*, wherein the learner is autonomous and

internalises the learning that occurs within a social situation, or belongs to and is specific to the *group of learners*, wherein the learner develops a collective understanding that is an integral part of a community of learners. The purpose of this study was to train CPCP educators who could then decide if they wished to stimulate others at work to adopt a CPCP approach. This idea of mastery of a particular domain of learning through social interactions within a particular setting and then finding ways to apply what has been learned in another context is congruent with Vygotsky's sociocultural theory (1978). This is one of the theories grouped under the heading of socioconstructivism and more specifically under dialectical constructivism (see figure 4), where learning is developed within a sociocultural environment but is internalised by the learner.

Vygotsky's Sociocultural Theory and ELearning

Lev S. Vygotsky was an early twentieth-century Russian psychologist who was influential in the development of the socioconstructivist movement. Although Vygotsky passed away from tuberculosis in 1934 at the age of 37, his prolific writings (over 200 articles and books) remain a legacy that is still, and in some respects more, relevant today (van der Veer, 2007a). His original work theorised about the ontogeny of learning in children and was popularised in the 1970's when some of his works were translated from Russian to English (Cole, 2004). In the past two decades, more of his writings have been translated and his concepts have been expanded and extensively applied to characterise child and adult learning (Wertsch & Tulviste, 2005). Vygotsky's sociocultural theory, also referred to as cultural-historical theory (Daniels, Cole, & Wertsch, 2007), posits that the learners' social environment, culture, and history play a central role in the stimulation of higher cognitive processes and subsequently influence human development and the quality of the learning process. According to Vygotsky (1987-99), while learning is closely linked to social interactions, learners maintain independence

in following their own learning path. Vygotsky also advanced that individuals develop on a psychological level with the mastery and integration of cultural tools, which he termed mediators, such as language, graphics, and symbols, to guide the thinking process (Minick, 2005). For Vygotsky (2004a), “the problem of thinking and speech grows beyond the boundaries of natural science. It is transformed into the central problem of the historical psychology of man. It becomes the central problem of social psychology” (p. 63). In other words, “in order to understand the human mind we have to step outside of it and look at the cultural artefacts human beings have created” (van der Veer, p. 74). The interplay between the individual, the social environment, the historical context, and the cultural tools mediates learning and the development of the human mind. Mediation is thus another central concept to Vygotsky’s theory, whereas cultural tools help build links between the socio-historical world and the individual (Wertsch, 2007). Finally, the zone of proximal development (ZPD) is the most recognised concept of Vygotsky’s sociocultural theory. ZPD “is the region that lies beyond the learner’s independent problem-solving skill, but still within reach with the right support” (Bonk & Kim, 1998, p. 70). The ZPD represents the psychological plane where learning can occur through social and instrumental mediation (Del Río & Álvarez, 2007). It follows that the social environment must provide the necessary tools for the learner to master personally and socially relevant knowledge, skills, attitudes, and practices. This learning in turn becomes part of the history of mediated human learning as cultural tools are perpetuated, enhanced, and transformed from one generation to the next.

Since the mid 1990s, socioconstructivism has been successfully applied to eLearning courses in multiple settings whether for children or adults. Although most writings on the subject relate to courses offered in formal settings, authors reported having facilitated higher order

learning (i.e., increased problem solving skills) more easily with a socioconstructivist approach (Laurillard, 2002; Molenda, 2008; Spector, 2008).

ELearning and the Demand-Driven Learning Model (DDLm)

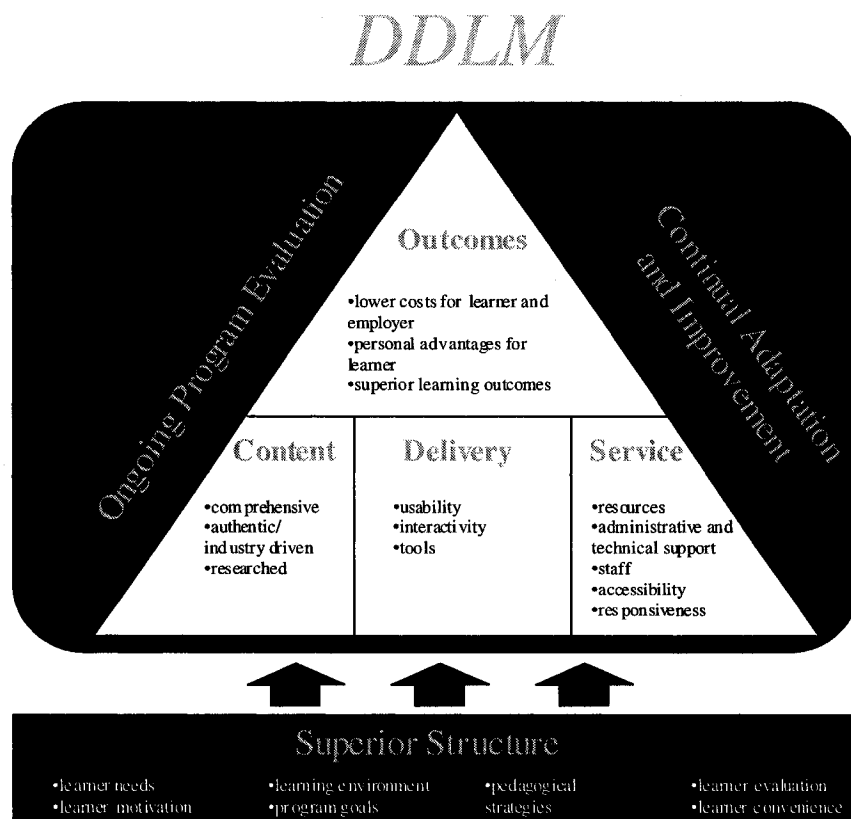
ELearning program success has been linked to solid design based on a well-articulated theoretical foundation (Hung & Der-Thanq, 2001; Morrison & Guenther, 2000). Abrami et al. (2006) cautioned that “technology alone is of little importance in effecting achievement gains in students. Course design and instructional strategies are far more important aspects of effective teaching than the technology that is used” (pp. 55-56). Because eLearning is constantly evolving, it is difficult to ascertain best practices for the design, development, delivery, and evaluation of educational programs (Jones & Asensio, 2002). Authors have proposed instructional design (ID)²⁹ models as guides for the development of eLearning activities in an attempt to ensure high quality standards. For Dean (2004), an ID model “helps to ensure that students will achieve the desired learning outcomes by providing a tool that makes planning for instruction more systematic and thorough” (p. 93). Numerous models and frameworks that have been developed for eLearning and a review of each one far exceeds the scope of this thesis. For a comprehensive review of many existing ID models, Gustafson and Branch (2002) or Ryder (2007) are recommended for further information on types of models and general descriptions.

The IECPCP eLearning continuing education workshop developed for this study focused on interactions with the online learning tools, between learners, and with the facilitator to build a common understanding of CPCP issues and to discuss how CPCP could be applied in the

²⁹ Instructional design (ID) refers to the steps followed to design, develop, deliver, and evaluate an eLearning educational program. Other related terms include instructional development, instructional systems design, instructional systems development, criterion referenced instruction, and human performance model (Gustafson & Branch, 1997; Mason & Rennie, 2006). In this text, I will use the term ID to indicate the more general process of developing an eLearning educational program.

workplace. Because the workshop was guided by Vygotsky's sociocultural theory, it was necessary to find a model that corresponded to the aforementioned emerging eLearning framework (see figure 3). I chose the Demand Driven Learning Model (DDL^M) for this study because it was the only constructivist model I found that had undergone some validation studies, and that was based on the learner's demands of content, delivery, and services and geared towards working adults (MacDonald et al., 2001) (figure 5).

Figure 5: Demand-Driven Learning Model



Reprinted with permission from MacDonald, Stodel, Farres, Breithaupt, & Gabriel (2001).

The DDL^M was developed through a collaborative process between industry experts and academics, with foundations in curriculum design, evaluation methods and educational psychology. It is a three-tier system that collates five main constructs: structure, content,

delivery, service, and outcomes. The first tier considers the learners' needs in terms of knowledge and learning environment, and the pedagogical approaches and program objectives are chosen according to the identified needs. The second tier involves the design, development, delivery, and evaluation of contents, learning activities, and support services for both the educator and the learner. This level involves a team of professionals (instructional designer, programmer, graphic artist, etc.) to create a quality product. This approach requires access to expert help and financial support, thereby limiting the applicability of the model. The third tier is the measurement of outcomes as determined by the learner and other consulted stakeholders (educators, instructional designers, programmers, employers, etc.). To this end, MacDonald, Breithaupt, Stodel, Farres, and Gabriel (2002) developed a summative companion survey for the model that served as a primary validation study of the DDLM's constructs. Testing of the companion survey demonstrated good internal reliability of each subscale (structure, content, delivery, service, and outcomes) with Pearson correlation products yielding internal consistency values ranging from .93 to .97. A predictive regression model was also conducted to verify the direction and strength of the relationship between the DDLM's constructs. The results showed that content, service, delivery and outcomes were positive predictors of superior structure with delivery and service obtaining the strongest statistically significant indicators. The authors recommended that the model be used to develop online resources to test its applicability.

The DDLM provides a constant feedback loop with learners and key stakeholders at each of the three tiers. This allows for continual adaptations or improvements of the learning program. It is the recursive interplay between the levels of the model, the resulting emergent design, and the sustained focus on the learner that imparts a constructivist quality to the DDLM. Otherwise, the DDLM does suggest a step-based approach not so unlike models linked to the traditional

framework of eLearning (see for example the ADDIE model, Malachowski, 2002, or the Dick and Carey model, Dick, Carey, & Carey, 2001). In addition, the DDLM does not guide online communications in terms of knowledge construction as clearly as other existing models (see for example the ICON model, Black & McClintock, 1995). Nevertheless, the DDLM is a comprehensive model that aims for superior quality in eLearning. It does provide guidance for every step of the design, development, delivery, and evaluation process and offers enough flexibility to be applied in the context of continuing education for healthcare providers.

Conclusion on ELearning for an IECPCP Workshop

The IECPCP eLearning workshop in this study aimed to help the learners develop the knowledge, skills, attitudes, and practices necessary to stimulate change in the workplace. Because learning to bring about change in a work environment requires higher order thinking to assess the situation, recognise areas for improvement, and plan for change, the workshop was developed with Vygotsky's sociocultural perspective in mind. I believed that this approach to learning would impart durable, learner- and contextually-specific learning. Moreover, Vygotsky's theory recognises the importance of empowering learners to direct their own learning process within their social and cultural setting. This offers a common anchor with Knowles' adult learning principles, which were also integrated in the design of the workshop. The workshop was designed to stimulate interactions with the web environment and with other learners to support the learning process and stimulate collective meaning-making. The facilitator adopted the role of mediator and worked within the learners' ZPD. Difficulty in stimulating interactions was anticipated because learners were not obligated to participate in any of the learning activities, were not receiving any particular certification, and were not financially invested in the continuing education program. How this lack of obligation and investment would

affect participation and social interaction in the online environment during the delivery phase was also examined, as it was directly related to the primary research question in this study.

Interprofessional Practice in Healthcare

Defining Collaborative Patient-Centered Practice (CPCP) and Relevant Concepts

As previously stated, learning how to work more efficiently with coworkers and stakeholders is becoming part of healthcare providers' required competencies (Nahrwold, 2005). Because there are documented advantages that substantiate the value placed on increased collaboration in healthcare (Meads & Ashcroft, 2005), it is necessary to first define what collaboration means and how this term relates to other expressions used in healthcare. Some writings on this topic showed that collaboration and cooperation were often interchanged without differentiation or implied they were both interdependent (Bailey, Jones, & Way, 2006; Krogstad, Hofoss, & Hjortdahl, 2004; Norsen, Opladen, & Quinn, 1996; O'Halloran, Hean, Humphries, & Macleod-Clark, 2006; Way & Jones, 1994). Alternately, a substantial number of writings made a clear distinction between the two terms, especially in the fields of education and administration (Case, Stevens, & Cooper, 2007; Denise, 1999; Smith & Dirkx, 2007; Takeda, Chen, Napier, & Johnson, 2005). Comparing and contrasting the definitions of cooperation and collaboration can bring a better understanding of what these concepts mean and how they relate to practice in healthcare.

Although there are a number of definitions for collaboration in healthcare, they do share a common thread. Definitions speak of shared expertise³⁰ between healthcare providers, the client and other stakeholders such as community programs and support groups to deliver healthcare services (Handron, Diamond, & Zlotnik, 2001; Marett, Gibbons, Memmott, Bott, & Dukes,

³⁰ Shared expertise refers to scopes of practice that are similar between healthcare providers and can allow either one to provide a particular healthcare service given appropriate training.

1998; Stewart, 2001). Way et al. (2000) defined collaboration as “an interprofessional process of communication and decision-making that enables the separate and shared knowledge and skills of health care providers to synergistically influence the client/patient care provided” (p. 3). For Henri and Lundgren-Cayrol (2001), collaboration first requires a personal reflection on a problem and the result of this cognitive process is subsequently shared with the team. Collaboration is therefore socially embedded within the context of the application. It relies on human interaction through discussions, arguments, and negotiations to construct a personal and a common plan of action that represents the views and expertise of each member of a team. Collaboration has also been qualified as inclusive, interdependent, devoid of hierarchies, and relying on shared commitment (London, 1995/2006).

In contrast to collaboration, which implies an interdependent relationship to support and achieve personal and collective goals,

Cooperation relies on the division of tasks and responsibilities within a team. Each member is responsible for doing a job, for completing an activity or for accomplishing a sub-task. It is the whole of these jobs, activities, and sub-tasks that drive the team toward its goal [translated] (Henri & Lundgren-Cayrol, 2001, p. 32).

London (1995/2006) emphasised that “collaboration, then, involves articulating a shared purpose and direction and working toward joint decisions. This distinguishes collaboration from other forms of cooperation which may involve common interests but are not based on a collectively articulated goal or vision” (p. 3). Takeda et al. (2005) added that cooperation implies an individual completion of tasks toward common team interests (figure 6).

Although cooperation and collaboration can help teams achieve similar results, collaboration is superior to cooperation, especially in complex situations, because this approach

allows healthcare providers to answer the patients' needs in a more efficient and well-articulated manner. The difference is embedded in the process followed by healthcare providers to achieve team goals. Consequently, when healthcare providers are collaborating they are partly representing each team member during their interactions with patients and caregivers, and they transmit the same messages. This is supported by Stoffels, Broekhuls, and Molleman (2004), who examined how collaboration and cooperation between medical specialists affected the care they delivered. They completed a qualitative case study of an oncology team and a geriatric team

Figure 6: Process for collaboration and cooperation

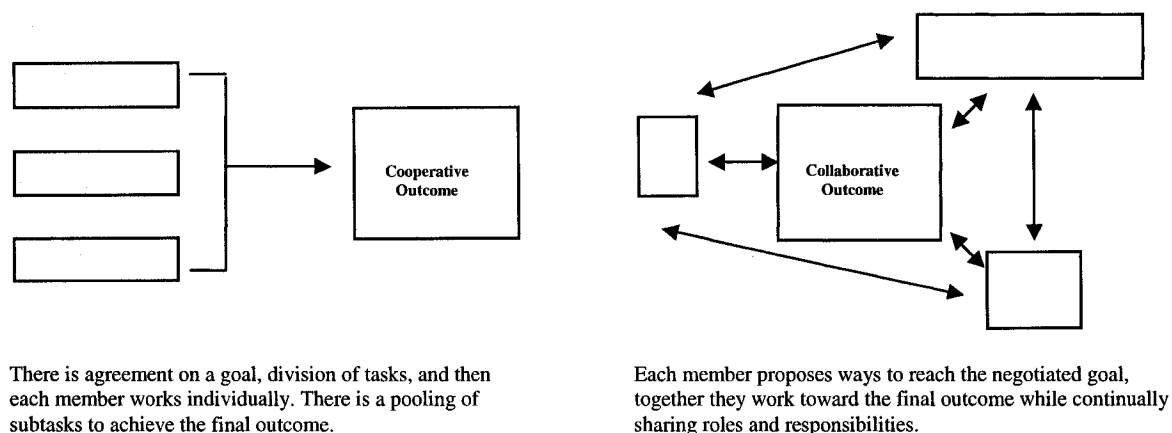


Figure adapted from Henri & Lundgren-Cayrol, 2001, p. 34.

comprised of medical specialists. Their findings led them to conclude that collaboration was more effective and more efficient than cooperation for high complexity cases. Cooperation, on the other hand, was no more effective than collaboration but more efficient in low complexity cases. Although limited to a small number of participants and to circumscribed areas of practice, these findings do suggest when collaboration could be applicable (figure 7).

Figure 7: Comparison between cooperation and collaboration

	Cooperation	Collaboration
Mutuality of goals	Different goals can exist Common interest	Sharing of collectively negotiated goals
Resource sharing	No	Yes
Commitment	Low	High
Structure	Independent and autonomous	Interdependent and new collective structure is organised
Agreement	Work within clearly defined professional boundaries	Share within overlapping roles and responsibilities
Trust	Low	High
Example	Communicating to other team members what interventions you are doing with a patient	Teaching other team members how they can help you with your interventions (within their area of expertise)

Adapted from Wang & Archer, 2004, p. 272; and Gray, 1989, p. 5.

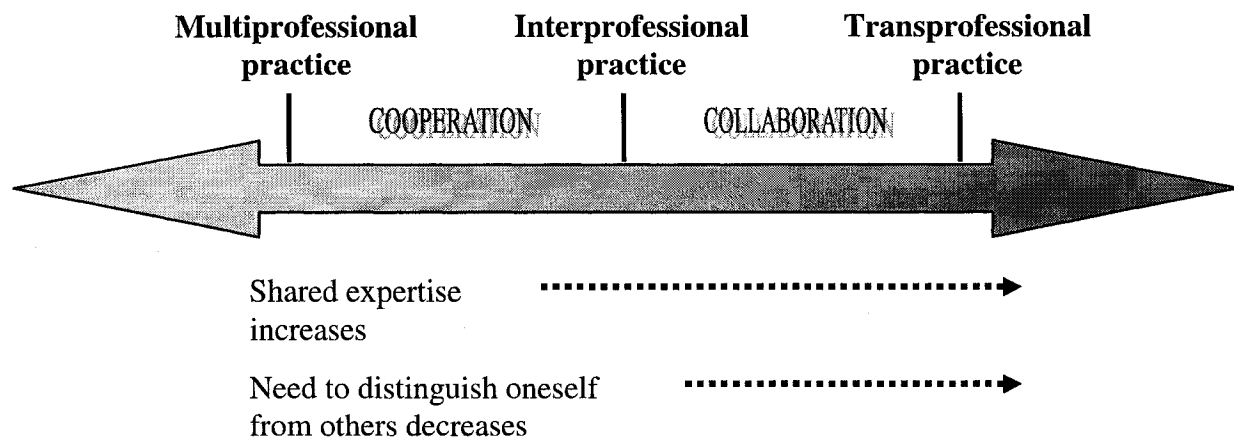
There are various terms to describe the praxis of cooperation and collaboration in healthcare settings and it can be difficult to understand which term to choose to convey a desired meaning. Frequently used terms include teamwork, parallel practice, coordinated care, shared care, multi-, inter- and trans- disciplinary practice and multi-, inter- and trans-professional practice. In some cases, these terms tend to reflect an arbitrary choice by each healthcare provider, author or institution. In other cases, the term is carefully chosen to reflect a particular intent. While these expressions are often used interchangeably, some authors suggest that the distinction between the prefixes multi-, inter-, and trans- and the suffixes disciplinary and professional should be respected (Corser, 1998; Health Canada 2004; Rice, 2000)

What follows is a brief description of the aforementioned prefixes and suffixes, after which I will present the term adopted in this thesis. According to the Merriam-Webster Dictionary (2008), the prefix *multi* stands for many or much—meaning a certain number of healthcare providers who work together. The prefix *inter* expresses a reciprocal relationship,

occurring between, or shared by—implying that it extends beyond mere sharing of information to include some type of exchange of roles and responsibilities. The prefix *trans* stands for across or beyond—suggesting a passage toward something else such as a change in roles and responsibilities. The suffix *disciplinary* relates to a particular field of study or specialisation. Currently, there are many healthcare professions that include various fields of specialisation or areas of interest. It is therefore possible for two or more healthcare providers from different disciplines to collaborate together without leaving the boundaries of one profession. This is the case in the field of medicine. The suffix *professional* refers to the characteristics of one of the learned professions, implying a vocation with specialised knowledge. Consequently, collaboration in this context automatically assumes different professions are involved. However, the term professional, taken in its strictest sense, does not apply to healthcare providers who are not part of one of the regulated health professions. For example, personal support workers or rehabilitation assistants are not regulated and are therefore not considered healthcare professionals. Hence, there are shortcomings to using the terms disciplinary or professional. Many authors (Barr, 2002; Gilbert, 2005a) including Health Canada (2004) have adopted the suffix *professional* in their writings to emphasise their desire for healthcare providers to collaborate beyond the borders of their profession. Still, in response to the exclusive semantic nature of the suffix *professional*, the use of this term should be taken to include all healthcare providers whether they belong to a regulated health profession or not.

Figure 8 illustrates the continuum of teamwork in healthcare between multiprofessional, interprofessional and transprofessional practice.

Figure 8: Praxis of cooperation and collaboration in healthcare



There are many ways to visually represent the terms multiprofessional, interprofessional, and transprofessional. I suggest that they form a continuum linked to the level of shared expertise and the need for healthcare providers to distinguish themselves from others. I also propose that cooperation is an element of multiprofessional practice while collaboration is an element of interprofessional and transprofessional practice. Original figure based on the writings of Ivey, Brown, Teske, & Silverman (1988).

The figure is complemented here by examples that demonstrate the application of each approach.

By comparing three approaches to teamwork, it is easier to circumscribe what

interprofessionalism entails. The praxis of cooperation and collaboration in healthcare can be summarised by the following examples:

1. Multiprofessional practice refers to individuals from different professions who work independently on common cases and share the results of their assessments and interventions with team members. The primary purpose of multiprofessional practice is to coordinate individual care strategies while team members stay committed to their profession (Poulton & West, 1997). Multiprofessional practice therefore adheres to the principles of *cooperation*. For example, this could be a meeting, possibly including the patient, in which patients' cases are reviewed and representatives of each provider involved in care comment on progress and explain their proposed care plan. Although

this approach can be patient-centered, it is the sharing of information rather than the negotiation of common goals and mutual learning that takes precedence.

2. Interprofessional practice integrates the knowledge and expertise of team members from different professions to set common goals with patients in their care. Each member then works within his or her area of expertise, while integrating strategies borrowed from other team members, to achieve the collaborative team goals. Continual communication, consensus between team members, and interdependence are the guiding principles of interprofessional practice (Freund & Drach-Zahavy, 2007a, 2007b). This approach to care corresponds to the principles of *collaboration* and healthcare providers are committed to their team rather than their profession. Using the previously described team meeting as an example, the difference in this case would be that the team, which must include the patient and/or family as equal team members, would discuss common priorities for care. The team members would then share and negotiate possible actions and potential owners for each action, and share strategies to help each other achieve the goals.
3. Transprofessional practice refers to a transfer of roles and responsibilities and corresponds to the principles of *collaboration*. This implies that team members take on tasks that are beyond their usual scope of practice but for which they have received training according to a negotiated protocol. For example, a healthcare team in a rural community may come to an understanding with a rheumatologist in an urban center that they may prescribe certain tests and administer certain medication according to a predetermined care plan. Perhaps a specialised nurse or an occupational therapist could then provide some services usually offered by a rheumatologist. Transprofessional practice is reported less frequently in the literature and tends to be associated with under-

served areas where transferring certain roles is necessary to provide access to basic health services. Instances have been documented in which healthcare professionals and professional colleges resist transprofessional practice more than other types of collaboration because it represents the greatest departure from habitual modes of operation and the greatest legal implications. Yet this approach to care has the highest potential for helping to resolve the ever increasing healthcare human resource crisis.

Among the various terms available, Canadian experts have chosen to adhere to the principles of interprofessional practice and the related concept of collaboration. Furthermore, many have adopted the expression proposed by Health Canada: *collaborative patient-centered practice* (CPCP). Health Canada suggested this term because it explicated that the patient is part of the team, an approach to care that has the potential to improve the efficiency and quality of care (Howe, 2006). Recently, the term collaborative person-centered practice has surfaced (Hall, Weaver, Gravelle, & Thibault, 2007), and in time this appellation could likely replace its predecessor as it represents a more inclusive terminology that is relevant to health service providers who don't necessarily view end-users of their services as patients (community service nurses, social workers, etc.). Because it is the definition of a chosen term that conveys meaning rather than its choice, it is important to note that CPCP is viewed as a process

designed to promote the active participation of each discipline in patient care. It enhances patient- and family-centered goals and values, provides mechanisms for continuous communication among caregivers, optimises staff participation in clinical decision making within and across disciplines and fosters respect for disciplinary contributions of all professionals (Health Canada, 2004, p. 2).

For the purpose of this study, I have opted to use the term CPCP because this expression stipulates the centrality of collaboration to effective and efficient healthcare services and invites a more accurate perception of the principles of interprofessional practice. This is a notion parallel to Vygotsky's sociocultural theory where learning occurs as a collaborative process between individuals and society as a whole. Given the complexity of the terminology used to describe teamwork in healthcare, I (as the workshop designer and facilitator) dedicated time during the workshop to help learners differentiate between the various expressions. This afforded them the versatility needed to come to a common understanding of the diverse literature in this field. The workshop also provided learners with the opportunity to share with each other what this terminology meant for their own personal practice and reflect on their collective discussion to decide how they were going to integrate this into their teaching strategies as IECPCP educators.

CPCP and Professional Culture

Proponents of CPCP claim that professional culture is an underlying element that could stifle collaboration depending on the approach that is adopted (Pellatt, 2007; Schmitt, 2006). Indeed, the different values held by healthcare providers in a team can lead to diametrically opposed views on the best course of action for patient care, thus creating obstacles to collaboration (Gollop, Whitby, Buchanan, & Ketley, 2004). This reflects the central posit of Vygotsky's sociocultural theory where learning and social interaction are mediated by cultural and historical compatibility, another example of the link between CPCP and sociocultural theory.

To understand the influence culture has on collaboration we must first come to a common understanding of what culture is. As Wang and Reeves (2007) pointed out, "Given the huge number of definitions of culture, it is difficult, if not impossible, to pick one appropriate definition, because different scholars define culture based on their own research interests and

experiences” (p. 3). Danesi and Perron (1999) revealed that two main ideas about culture seemed to emerge from the various definitions they inventoried: “(1) culture is a way of life based on some system of shared meanings; and (2) culture is passed on from generation to generation through this very system” (p. 22). In the context of CPCP, it is the notion of professional culture that is of particular interest because it involves differently organised groups of healthcare providers. In their work on professional cultures, some of which was based on a case study in healthcare, Bloor and Dawson (1994) explained that professions “exist within a historical context and professional environment, which, together with the societal culture, shape their operating practices and professional codes, beliefs, values, and ceremonies” (p. 283). Bloor and Dawson emphasised that within professional cultures, expectations, perceptions and practices are shared by a group rather than being individually-based and it is the perceived group consensus that shapes individual behaviour. In other words, professionals will act in the way they think their profession wishes them to act, indicating that professional culture is deeply engrained within each individual and difficult to change.

Relying on her experience with interprofessional teamwork in palliative care, Hall (2005) detailed how professions historically evolved into cultural communities each having different “values, beliefs, attitudes, customs and behaviours” (p. 188). She explained how in time, professions had attempted to define themselves by obtaining occupational monopoly over the provision of certain elements of care and how this had served to define their boundaries. Hall argued:

Each profession has struggled to define its identity, values, sphere of practice and role in patient care. This has led to each health care profession working in its own silo to ensure its members (its professionals) have common experiences, values, approaches to

problem-solving and language for professional tools. It is not only the educational experience, but also the socialization process which occurs simultaneously during the training period that serves to solidify the professional's unique world view. At the completion of their professional education, each student will have mastered not only the skills and values of his/her profession, but will also be able to assume occupation identity (p. 190).

Hall's (2005) comments point to the idea of occupational identity, also called professional identity, which is the internalisation of a professional culture and as such is another important concept to understand in connection to CPCP. Brott and Myers (1999/2002) conducted a grounded theory study of the development of identity in school counsellors and their definition seemed quite applicable in the context of healthcare. They defined professional identity as "a frame of reference for carrying out work roles, making significant decisions, and developing as a professional" (p. 146). I would add that this frame of reference is flexible to varying degrees, otherwise we couldn't think it possible to change healthcare providers' values toward a CPCP approach. Law, Meijers, and Wijers (2002) have theorised extensively on the development of professional identities in the context of educational and career counselling. They contended that social identity, or "ways in which I am both like and not like other people" (p. 434), was part of the process of developing a professional identity. Based on career-learning theory (Kelly, 1955), Law et al. postulated that professional identity represented a personal learning process about how individuals saw themselves within their profession. This is termed "personal construct", in contrast to how society viewed their profession, which is termed "public concept". Applying Law et al.'s suppositions to the healthcare milieu, we can surmise that pre-licensure healthcare providers develop a public concept during their training years through the integration of

knowledge, attitudes, skills, and practices inherent to a set of socially recognised and defined work roles. A confluent process is then added to this, whereby sifting through experiences and taking mental notes of differences and similarities when compared to their assumptions, pre-licensure healthcare providers create a personal construct, which equates to the internal representation of their chosen profession. Law et al. held that adults develop professional identity by continually comparing their public concepts to their personal constructs of a profession throughout their training and working life.

In a CPCP situation, team members' cultural values and professional identity are challenged. They are being asked to revisit the boundaries³¹ of their profession and to share with other team members some of their expertise within the areas where roles and responsibilities overlap. Consequently, healthcare providers must revisit their boundaries and derive a common sense of purpose with other team members. Redrawing professional boundaries leads to a shift from their own individual professional identities to a collective professional identity (Nesting & Williams, 1996). Rather than representing their individual professions with patients and their caregivers, they are representing the team while still putting forth the particular set of expertise for which they were trained. CPCP thus challenges a person's professional identity since roles, tasks, and daily functions may need to change or be shared with other healthcare providers. In essence, CPCP makes it more difficult to clearly differentiate one profession from another as a move occurs from an engrained personal occupational identity toward defining a group identity (Brems, Johnson, Warner, & Roberts, 2006; Rogers, 2001). This abrupt change in the public

³¹ According to Jones (2007) "Boundaries can be seen as interfaces, clear dividing lines between areas of different ownership or shared areas of contact and can be seen in different contexts, e.g., professional, geographical, territorial, political, cultural, philosophical and visual or graphic. The concept of a boundary can be seen as relevant to, and can therefore be addressed by a variety of disciplines and professions" (p. 355).

concept of each team member's profession forces them to change their personal constructs thus inciting resistance to CPCP.

For this reason, Atwal and Caldwell (2006) stated that they were not convinced that moving toward CPCP is desirable because it requires too many changes in workplace organization and healthcare provider attitude. In response to the idea that CPCP needs healthcare teams to be flexible and be willing to cross professional and organisational boundaries, they criticised, "It is remarkable, however, that current health-care policy has continued to support a concept [role sharing] that itself might be associated with aggravating rather than encouraging interprofessional collaboration" (p. 360). Atwal and Caldwell advocated for stronger multiprofessional teams with well-articulated cooperative strategies. In their view, team members should not be called upon to participate in a cultural shift but should instead develop stronger communications skills to be able to delineate who does what and clearly inform each other of patients' progress.

This view was also shared by Patel, Cytryn, Shortliffe, and Safran (2000) who examined the efficiency of communication strategies in a primary care hospital. They found that organisation of care was improved with an appropriate level of redundancy when patients were managed by a small group of healthcare providers who were responsible for deciding which profession should be involved and when. This core group also served as a filter for which information should be transmitted to other healthcare providers. However, CPCP is not about the level of comfort of healthcare providers within their profession but rather reflects an approach that is centered on the patients' needs. CPCP enables patients to access the care and the services that they have chosen to receive in a timely and effective manner regardless of professional territories.

Nevertheless, studies have highlighted the culturally-related difficulties encountered when adopting a CPCP approach to care and have advocated for some form of CPCP training at the pre- and post-licensure levels (El-Zubeir, Rizk, & Al-Khalil, 2006; Horsburgh, Perkins, Coyle, & Degeling, 2006; Smith & Pilling, 2007). For example, at the pre-licensure level, an evaluation of the common learning program in the UK called “New Generation Project” revealed that stereotypes³² were an important part of health professionals’ cultures and that IECPCP should focus on changing these stereotypes over time (Hean, MacLeod Clark, Adams, & Humphries, 2006). A related three-year ethnographic study (2002-2005) of another common learning program in the UK revealed that, unfortunately, the topics that should be included in IECPCP to help change the compartmentalised culture in healthcare are still unclear (Steven, Dickinson, & Pearson, 2007). At the post-licensure level, Gollop et al. (2004) conducted a qualitative study to explore scepticism and resistance to CPCP and found that

Clearly, not all healthcare staff are convinced of the value of large scale national improvement programmes. While not actively opposing their progress, some are not engaging with them. The reasons for this are complex and relate to contextual, promotional, and personal factors (p. 112).

The authors contended that healthcare providers must first develop a common understanding of the value of change toward CPCP before they can even consider a cultural change in the way they deliver care. Similarly, Deegan, Watson, Nestor, Conlon, and Connaughton (2005) found that “embracing change can quickly move to resistance when external and internal values conflict” (p. 27). Rhydderch, Elwyn, Marshall, and Grol (2004) suggested using complexity theory (Crabtree, Miller, & Stange, 2001; Plsek & Greenhalgh, 2001) to guide IECPCP. This

³² A stereotype is a generalised, oversimplified standardised image or a categorical judgment of a person or a group (MSN Encarta, 2008; Turner, 1999)

theory holds that changes in healthcare providers' practice must always be preceded by an activity that helps them grasp what is at stake and understand the environment for change.

For this intrinsic case study, writings on professional cultures indicated that to fulfill their CPCP educator roles, the learners who participated in the IECPCP eLearning workshop needed to understand that they could play an important role in facilitating changes in collaborative practice and culture. By redefining the public concepts of a profession within a learning context, they could themselves become a reference for professional identity as it relates to functioning within a CPCP environment. During the study, the participants were encouraged to be actively involved in the emergence and modeling of their own learners' professional identity by influencing beliefs and attitudes towards CPCP. To achieve this, I designed the workshop's learning context to provide multiples views of the various topics, providing examples for many different professions. I continually invited learners to explore their own professional beliefs and attitudes in relations to CPCP and compare them with other professional views through interactions with other workshop participants. I designed the workshop to be responsive to different professional cultures, and modeled behaviours that CPCP educators should adopt to instigate cultural change.

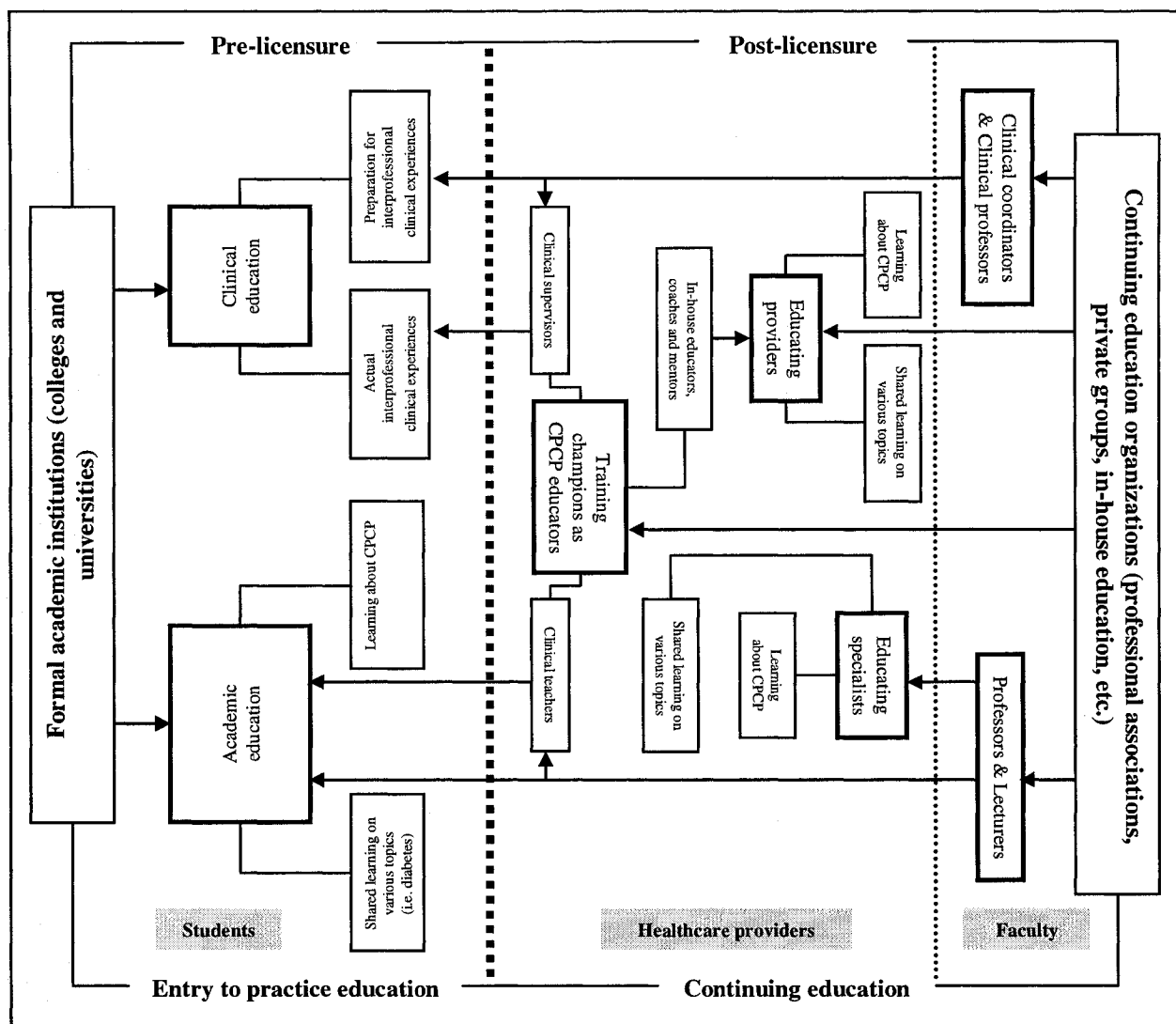
Interprofessional Education for Collaborative Patient-Centered Practice

Through various initiatives, committees, and funding programs, federal and provincial policies are providing momentum for CPCP change in Canada. Yet we have seen that integrating CPCP strategies means moving to a different model of care, and healthcare providers are resisting this modification to their habitual mode of operation. The challenge is to devise strategies that will allow CPCP concepts to reach the clinical and educational settings at the pre- and post-licensure levels. Currently, best practices in CPCP are still being researched and

methods to create a culture of CPCP in healthcare are only starting to take hold in pockets of individuals in the clinical setting (Health Canada, 2004). These changes are mostly spearheaded by government and academia through research grants and conferences specific to CPCP.

Many have argued that changes in attitudes, beliefs, strategies, and policies need to occur simultaneously at the individual, disciplinary, organisational, and political levels to ensure long-term acceptance and application of CPCP (Barr, 1998; Gardner, Chamberlin, Heestand, & Stowe 2002; Lamorey & Ryan, 1998). Such changes require input from all stakeholders, sustained effort over a lengthy period of time, and flexibility in CPCP application strategies to respect individual organisational cultures. The 2003 First Ministers' Accord on Healthcare Renewal was instrumental in focusing national attention on CPCP (Health Canada, 2003). The Accord proposed that healthcare providers need to be educated differently to respond to the changing healthcare needs in Canada and thus implement CPCP practices. In 2004, Health Canada developed an initiative on interprofessional education for collaborative patient-centered practice (IECPCP). This initiative revealed that a culture change would only occur through IECPCP programs aimed at both pre- and post-licensure healthcare providers. Figure 9 presents the various target groups of IECPCP in Canada's current educational and healthcare climate.

Figure 9: Target audiences of IECPCP in Canada



Original figure showing the relationship between entry-to-practice education and continuing education and the overlap between the actors involved. IECPCP programs need to target pre- and post-licensure healthcare providers. At the pre-licensure level, educational programs should focus on academic and clinical education. At the post-licensure levels there are three main groups of learners to target: 1) team members who apply CPCP principles; 2) champions who then become CPCP educators; and 3) faculty members who influence entry to practice education for students and formal continuing education programs. This study focused on training CPCP champions.

Definition of IECPCP

Many terms and definitions of interprofessional education (IPE) or IECPCP can be found in the literature. El-Zubeir et al. (2006) construed that IPE was more easily understood when contrasted with multiprofessional education (MPE). According to El-Zubeir et al., “multiprofessional education refers to situations where students from several professional backgrounds learn together but independently or in parallel, interacting on a limited and transient basis” (p. 620). The authors further stated that “interprofessional learning implies a greater degree of intended, structured interaction and collaboration between students” (p. 620).

The definition for IPE proposed by the UK Centre for the Advancement of Interprofessional Education (CAIPE) is most often cited in the literature and is used to define IECPCP. IPE thus refers to “occasions when two or more professions learn from and about each other to improve collaboration and the quality of care” (CAIPE, 1997, revised in Barr, 2002, p. 6). Freeth, Hammick, Koppel, Reeves, and Barr (2002) retooled this definition in the context of the Joint Evaluation Team (JET) report and added: “Members (or students) of two or more professions associated with health or social care, to be engaged in learning *with, from* and *about* each other” (p. 12). The combination of these two definitions reads as follows: “occasions when members (or students) of two or more professions associated with health or social care, are engaged in learning *with, from* and *about* each other to improve collaboration and the quality of care”. This latter statement represents the definition of IECPCP adopted for this thesis because it encompasses both pre- and post-licensure healthcare providers and includes social care.

IECPCP outcomes and strategies

It is difficult to evaluate IECPCP educational events. A number of questionnaires and evaluation framework have been developed to facilitate education program evaluation, each

assessing different aspects of CPCP (see for example Dubouloz et al., 2007; Carpenter, Barnes, Dickinson, & Wooff, 2006; Haig & LeBreck, 2000; Leipzig et al. (2002); Luecht, Madsen, Taugher, & Petterson, 1990; McFayden, Webster, & Maclaren, 2006). Some questionnaires examine pre-licensure receptivity to interprofessional learning, rate attitudes about CPCP or subjectively appraise team functioning. As noted by MacDonald (2008), few of these questionnaires have been reported more than twice in the literature and even fewer have undergone psychometrics testing. In many cases other methods, often qualitative, are used to assess the outcomes of IECPCP. These include discourse analysis, interviews, focus groups, and observations. With such a variety of evaluation methods, it is difficult to interpret outcomes of IECPCP and compare results from one study with the findings of another.

To address this issue, Barr, Hammick, Koppel, and Reeves (1999) and Koppel, Barr, Reeves, Freeth, and Hammick (2001) devised a set of criteria to interpret the findings from IECPCP studies and compare them. They based their evaluation framework on a modified version of Kirkpatrick's (1967) four levels of outcomes. Kirkpatrick's framework was developed to assess continuing education programs and had the advantage of allowing the investigators to consider both qualitative and quantitative studies when evaluating IECPCP literature. After developing their framework, the authors conducted a well-structured systematic review of IECPCP literature with clearly defined inclusion and exclusion criteria and reported their findings in a number of publications (see Barr, Freeth, Hammick, Koppel, & Reeves, 2006; Barr et al., 2005), the first of which was the JET report (Freeth et al., 2002). Their findings were classified according to the newly developed framework referred to in this thesis as the JET framework, and were organised as follows:

- Level 1 - Learners' reactions
- Level 2a - Modification of learners' attitudes/perceptions
- Level 2b - Learners' development of knowledge/skills
- Level 3 - Learners' behavioural change
- Level 4a - Change in organisational practice
- Level 4b - Benefits to patients

The findings from the 107 studies included in the systematic review showed that pre-licensure learners' perceptions about CPCP did change with IECPCP programs but there was no evidence that the changes persisted once they entered the workforce. Documented changes in behaviour and practices were most often linked to IECPCP programs that targeted post-licensure learners. The educational programs that reported behavioural or practice changes were designed for a prolonged period of time, exceeding at least two weeks. These educational programs also promoted experiential learning in the workplace or focused on CPCP strategies that were applicable in the workplace.

Another systematic review was conducted by Cooper, Carlisle, Gibbs, & Watkins in 2001 to examine literature pertaining only to pre-licensure IECPCP. Although Cooper et al.'s method of reporting on the literature was not clearly anchored within an evaluation framework, they did find that there was little evidence the learners had applied CPCP skills during their clinical experiences or once they had entered the workforce. Cooper et al. further indicated that "educational and psychological theories were rarely used to guide the development of interventions and outcomes measured" (p. 235).

Irajpour (2006) also conducted a systematic review to examine if post-licensure IECPCP on pain management lead to changes in health providers' practice and in patients' outcomes.

Although Irajpour's framework for reporting on the results was not clearly defined, he did suggest that "behavioural change lays along a continuum, ending with the maintenance of change in the learner" (p. 677). He explained that many of the studies he reviewed reported on educational programs of short duration (a few hours to a few days) and the author was concerned that this was not enough time to instigate the desired behavioural changes the studies were investigating.

In addition to systematic reviews, a scan of individual published studies revealed interesting findings about when to offer IECPCP, how to organise learning events, and which learning approach to use. Some authors recommended IECPCP initiatives take place in early pre-licensure programs because this provides an opportunity to avoid the development of negative stereotypes and attitudes that are often difficult to reverse in post-licensure programs (Hall, 2005; Horsburgh, Lamdin, & Williamson, 2001). Counter arguments have been made, claiming that IECPCP is best suited for the late pre-licensure programs because learners need to be more secure in their own professional roles before they can function effectively as team members in academic programs and interact collaboratively in clinical education settings (Parsell & Bligh, 1999; Pirrie, Hamilton, & Wilson, 1999). Still others have suggested that IECPCP is successful when focused on post-licensure healthcare providers because they are situated in the environment where CPCP is applied (Pelatt, 2007; Sievers & Wolf, 2006). Regarding the best way to approach IECPCP, some authors recommended that CPCP should be experienced by learners as they learn about various topics, such as pain, "where other professional perspectives would be represented and could be appreciated and explored within the learning group" (O'Halloran et al., 2006, p. 15). Finally, other authors explained that it was desirable to teach about the concepts of CPCP to change behaviours (Jackson & Bluteau, 2007).

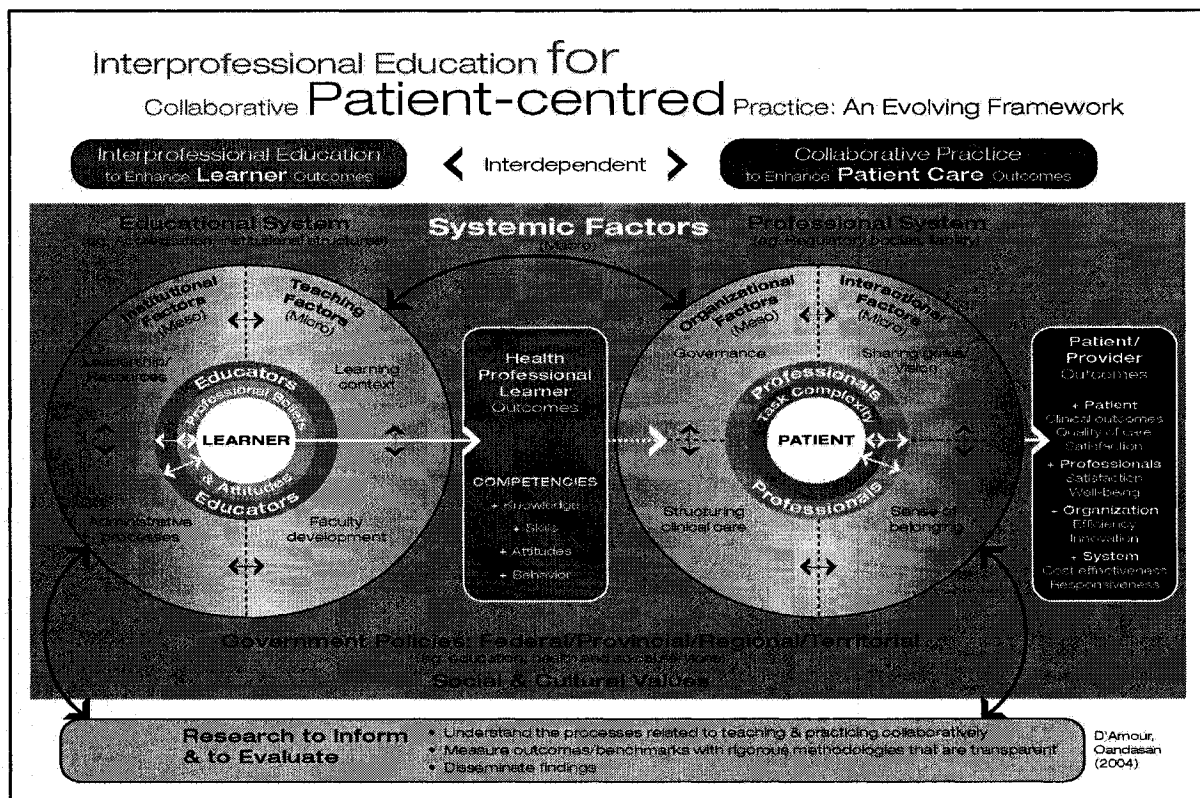
Pertaining to the organisation of learning events, studies have shown that interactive discussions can be useful in stimulating attitude change and revealed that no more than eight learners representing at least four different disciplines should be included in each discussion group (Fallsberg & Hammar, 2000; Russell & Hymans, 1999). In addition, it was recommended that the learning experience promote individual and team development as well as facilitate communication skills, problem solving abilities, and conflict resolution strategies (Anderson, Manek, & Davidson, 2006; Kopfstein, 1998). Authors have also advised that IECPCP should assist learners in developing aptitudes for group work, critical thinking, analysis, creativity, and self-learning (Cook, 2005; D'Eon, 2005). El-Zubeir et al. (2006) stated, "Indeed, the literature indicates that programmes which are interactive, structured, introduce progressively complex experiential learning tasks that are patient-centered and situated in a real or simulated work place environments are likely to succeed" (p. 628). Taking into account the variety of recommendations in the literature and the lack of high quality studies with clear theoretical frameworks and comparable outcome measures, Curran, Deacon, and Fleet (2005) noted that experts have not reached a consensus on the best pedagogical approaches, duration, location, and stage of IECPCP programs. Curran et al. therefore recommended researching and developing educational opportunities that touch on every aspect of pre- and post-licensure education and training.

IECPCP framework

Finding a model that can inform the design, development, delivery, and evaluation of an IECPCP workshop can be daunting. The complexity of interprofessional education, research, and practice increases the difficulty in portraying the intertwined elements (D'Amour & Oandasan, 2005). Nevertheless, a number of models have been published that could be used to guide

IECPCP endeavours (Allan, Campbell, Guptill, Stephenson, & Campbell, 2006; DeMarco, Horowitz & McLeod, 2000; Freund & Drach-Zahavy, 2007b; Jones, 2007; O'Halloran et al., 2006). The evolving IECPCP framework developed by D'amour and Oandasan (2004, 2005) is the only model found in the literature that addressed both the academic and practice sides of collaborative practice (figure 10).

Figure 10: Interprofessional education for collaborative patient-centred practice: An evolving framework



The IECPCP model provides a flexible frame of reference connecting interprofessional education with interprofessional practice. The academic side of the model (left circle) places the learner at the center of the professionalisation process. The model proposes that there must be a bidirectional relationship between learners and educators to help learners develop the values and beliefs necessary for CPCP to take hold. The model also contends that the educational context

must be conducive to interprofessional learning, that faculty must be trained to provide relevant learning opportunities, and that the educational program must be supported by the organisation in terms of process and leadership. The expected outcomes of IECPCP programs are the development of knowledge, skills, attitudes, and behaviours of collaboration.

The practice side of the model (right circle) places the patient in the center and proposes that the complexity of the services and care needed determines the composition of the team and the nature of the interventions. CPCP then requires shared vision and objectives by all team members. Socialisation between team members is important to build strong working relationship and instil a sense of belonging to the team. There must also be an agreement on team functioning and this must be supported by organisational structures. The anticipated outcomes of CPCP should be relevant for the patient, the healthcare providers, the healthcare organisation, and the healthcare system.

At the macro level (blue rectangle), the structure of the education system (e.g., program accreditation) and of the professional system (e.g., professional colleges) as well as government policies and societal demands all influence IECPCP. Finally, the model highlights the importance of investigating, evaluating, and reporting on IECPCP programs to advance the state of knowledge in this field.

Although the model is comprehensive, it does present some weaknesses. The notion of professional cultures is not addressed on the practice side of the model even though the importance of this notion has been documented. It is also difficult to ascertain where continuing education fits into the model. Yet there are some particularities of these types of educational activities that would be worth noting, such as competing priorities faced by post-licensure learners. Finally, the model does not propose a pedagogical framework to guide the design,

development, delivery, and evaluation of IECPCP programs. A complementary pedagogical model is therefore needed (Casimiro, MacDonald, Stodel, & Thompson, 2009; MacDonald, Stodel, Thompson, & Casimiro, 2009).

Conclusion on IECPCP for an ELearning Workshop

The workshop proposed in this study was responsive to recommendations found in the literature regarding the principles and concepts of CPCP and IECPCP. In particular, the workshop is designed to provide the cultural references necessary to help the learners develop the knowledge, skills, attitudes, and practices that would allow them to influence both pre- and post-licensure healthcare providers toward adopting CPCP.

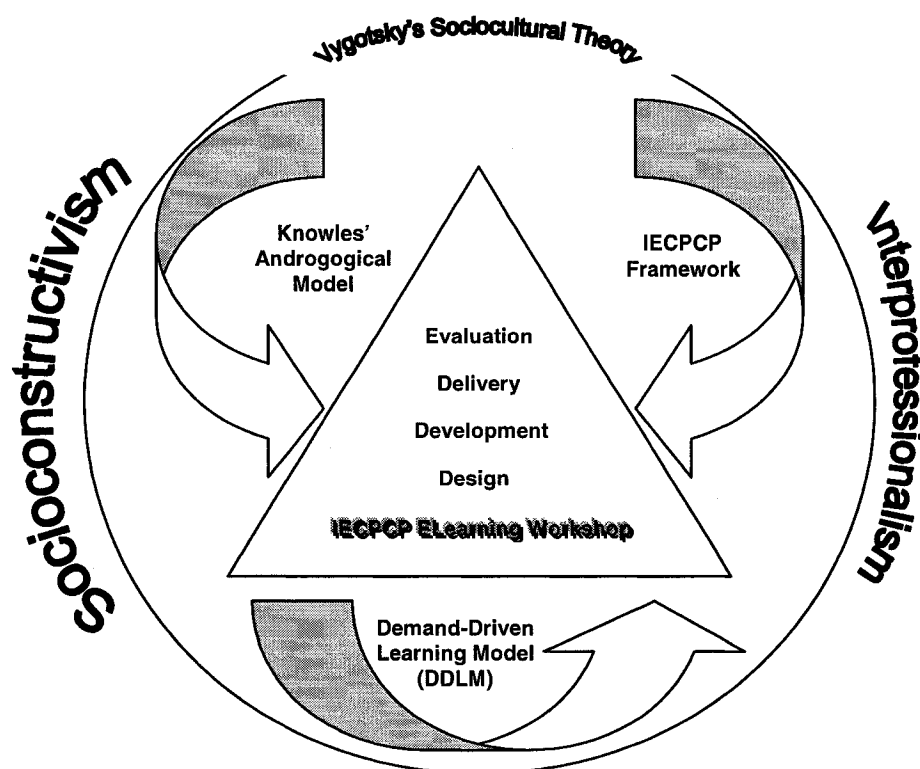
D'amour and Oandasan's (2004, 2005) IECPCP model was the most comprehensive framework found in the literature that linked both pre- and post-licensure aspects of IECPCP. The outcomes planned for this study (knowledge, skills, attitudes, and practices) were thus aligned with the outcomes proposed in the IECPCP model with the exception of behaviour which was substituted for practice to better demarcate this outcome from attitudes. Practice also corresponded with the definition of competency adopted for this study (see p. 2).

Finally the JET evaluation framework was the most comprehensive classification system found in the literature that was specific to IECPCP outcomes and was chosen to interpret the reported outcomes in terms of knowledge, skills, attitudes, and practices the participants perceived they had achieved as a result of participating in the eLearning IECPCP workshop.

Theoretical Framework

The theoretical framework presents relational concepts, theories, models, and paradigms emanating from the literature review that formed the basis of this study (figure 11).

Figure 11: Theoretical framework



The intrinsic case study was framed by the research paradigm of socioconstructivism; Vygotsky's sociocultural theory; and interprofessionalism, an emerging perspective on practice in healthcare. The case study focused on the design, development, delivery, and evaluation of an IECPCP eLearning workshop and was guided by the Demand Driven Learning Model (DDL) as a quality standard for instructional design, Knowles' androgogical model for the principles of adult learning, and the IECPCP framework in terms educational outcomes.

The study was framed by the socioconstructivist paradigm in which knowledge is created by interacting with the world around us and by reaching an interpretation that reflects the multiple facets of reality (Lincoln & Guba, 2000). Socioconstructivism is rooted in cognitivism and challenges behaviourists' adherence to stimulus response mechanisms as the sole explanation of human learning (Davydov, 1995). However, unlike cognitivism, where learning

occurs inside the mind, or behaviourism, where learning is transferred from the environment, socioconstructivism proposes that knowledge generation is linked to the co-construction of meaning between individuals within a social environment. Socioconstructivism calls for learner-centered pedagogy engaged in real world activities where knowledge is not transmitted, but actively constructed, interpreted, and integrated by the learner through social experience (Jonassen, 1991, 1992, 2002).

Interprofessionalism is an emerging perspective, a particular set of beliefs and values about the provision of healthcare services. Interprofessional practice, or CPCP, integrates the knowledge and expertise of team members from different healthcare disciplines, the patient, and all relevant stakeholders to set common goals and follow through with related intervention strategies with the patient in their care. Each healthcare provider becomes a representative of their team rather than their profession and works within his or her area of expertise to improve patient care. At the same time, each member incorporates shared strategies learned from the team, including patients and their families, to achieve the collaboratively-set goals. Continual learning through communication, negotiation, and consensus between team members is the guiding principle of interprofessional practice. Social interactions are therefore central to interprofessionalism and determine the direction a care team should take, rather than relying solely on pre-established guidelines or personal convictions.

Socioconstructivism and interprofessionalism therefore adhere to a relative ontology and intersubjective epistemology. According to the socioconstructivist paradigm, learning is dependent on interactions within a social environment and, according to the emerging interprofessional perspective, approaches to care are developed in an interdependent fashion between team members. Thus both the socioconstructivist paradigm and the interprofessional

perspective align well with Vygotsky's sociocultural theory (1978) where knowledge and psychological growth is linked to the social situations and the cultural interactions that occur within the learning or working environment.

This intrinsic case study explored the design, development, delivery, and evaluation of an eLearning continuing education program, and used the Demand Driven Learning Model (DDLM) (MacDonald et al., 2001) as a quality standard to guide the eLearning aspect of the workshop in terms of structure, content, delivery, service, and outcomes. Knowles' andragogical model (Knowles et al. 2005) provided a set of six assumptions about adult learning to inform the continuing education aspect of the learning workshop. Finally, the IECPCP Framework (D'Amour & Oandasan, 2004, 2005) gave direction for the evaluation of the learners' self-reported outcomes in terms of knowledge, skills, attitudes, and practices.

Conclusion on the Review of Literature

This review provided a synopsis of key literature pertaining to each aspect of the case study. Starting with continuing education and adult learning, this section targeted the learning principles that best suited the group of learners included in this study. The concepts pertinent to eLearning were then detailed. It was important to expose the link between the online technologies used in the workshop, the adult learning principles covered in the previous section, and the paradigm and learning theory chosen to guide the IECPCP workshop. Finally, CPCP and IECPCP were defined and described because they constituted the central topic of the online workshop that was designed, developed, delivered, and evaluated in this study.

CHAPTER 3

Research Design

Study Context

The focus of this study was to explore the factors that influenced eLearning design, development, delivery, and evaluation in the context of an IECPCP, professional development, continuing education workshop for healthcare providers. The workshop was structured to help learners become CPCP educators, and the study explored the perceived outcomes that the workshop participants reported. The intent was to capture the learners' experiences and their perceptions of the workshop's structure and content, the way learning was facilitated and managed, and the services received as they engaged with the activities presented in their virtual learning environment. The study also focused on understanding, from the learners' point of view, how this workshop changed or modified what they knew about CPCP, how they felt about these concepts, how this was applied in their everyday practice, and whether or not they had the opportunity to influence others toward the CPCP approach. The primary research question that guided this inquiry was:

What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

The secondary research question further refined the notion of outcomes as follows:

What self-reported outcomes, with regards to CPCP knowledge, skills, attitudes, and practices, will healthcare providers perceive they have achieved or facilitated in their workplace as a result of their participation in an IECPCP eLearning continuing education workshop?

I was inspired to conduct this study by a dearth in the literature on the design, development, delivery, and evaluation of eLearning for continuing education in healthcare, especially associated to IECPCP (Berge, 2001; Curran et al., 2003; DuCharme-Hansen & Dupin-Bryant, 2004; Manning & DeBakey, 2001; Olsen & Shershneva, 2004; UNESCO, 1997a, 1997b). In addition, this study was informed by scholarly literature which suggested that learning about CPCP could potentially shift the culture of healthcare toward cohesive teams who are able to deliver more effective, safe, efficient, and satisfactory health and social care services (Department of Health – UK, 2000; Lingard et al., 2006; Meads & Ashcroft, 2005; Oandasan & Reeves, 2005a; Romanow, 2002; Shortell, 2000). Finally, the eLearning workshop produced for this study responded to the challenge of developing a sustainable means to foster CPCP in healthcare (see for example Borduas et al., 2006) through the training of educators able to contribute to pre- and post-licensure IECPCP.

Philosophical Assumptions

Kanuka (2006) argued that to understand why certain research questions are asked and why particular modes of inquiry are chosen, it is necessary to ascertain the ontological and epistemological beliefs of the investigators as well as the values shaping the study. In Watson's view (2005), epistemology, ontology, and axiology are central to producing socially responsible research that is valuable and well-articulated. She continued by saying, "The notion of research as a "craft skill" which does not need to be underpinned by commitment to a consistent philosophical position implies that we can research "as if" the social structures we create are objectively real and unproblematic" (§ 10). In keeping with Watson's view, uncovering one's own philosophical position becomes central to any research process.

Finding a philosophical position is not a straightforward procedure. In 1992, Wolcott suggested that posturing oneself in the realm of theoretical possibilities in research was a multifaceted adventure that included professional research talents as well as personal philosophies and this view is still supported today (Creswell, 2007; Denzin & Giardina, 2008; Guba & Lincoln, 2005; Seale, 2007). Accordingly, my first step in developing this study was to conduct an in-depth self-reflection about my own philosophical position on reality (ontology); knowledge (epistemology); and values (axiology) as it related to this study. To build an ontological argument, I explored my perceptions on the nature of reality and questioned myself about whether I felt there was an “it” out there to be learned, understood, constructed or integrated. I based my reflections on my own experiences and lived stories as a researcher, educator, and healthcare provider. I discovered that I believed in relativist ontology, seeing my role as a researcher not as someone who is all-knowing and who holds the truth but rather as someone who wants to share information or perceptions so that an interpretation of reality may be constructed in collaboration with others. I was drawn to Eisner’s (2001) writings in which he explained that “researchers concerned with human relationships do not solve problems, they cope with situations” (p. 138).

I determined my epistemological stance by examining how the literature approached the study of the nature of knowledge. I found the writings of Denzin and Lincoln (2000, 2005) particularly useful as they compared and contrasted different approaches to qualitative research, leading me to align with an intersubjective epistemology. I believe that knowledge is a co-construction between individuals through interactions within a social environment. In the context of research, findings or knowledge are co-constructed between researchers and study participants through careful probing, information sharing, and joint reflection. According to this view,

dissemination of a study's findings involves the description of newly co-constructed knowledge and can be subjected to multiple interpretations.

Finally, I pondered axiology and examined the value system that influenced this study. The focus of this investigation was to uncover issues that would help to better understand the identified gaps in knowledge about continuing education, eLearning, and IECPCP. This led me to articulate the research questions that focused on the gaps in knowledge that I felt were important to learn more about. In addition, my ontological and epistemological stance placed me as an active participant in the study and for the interpretation of findings, namely through active co-construction of meaning.

The philosophical assumptions presented here directly correspond with the study's theoretical framework (figure 11). The socioconstructivist paradigm, Vygotsky's sociocultural theory, and the emerging interprofessional perspective adhere to relativist ontology, intersubjectivist epistemology, and support an axiology anchored in co-construction of meaning. This philosophical position provided direction throughout the investigation and guided the choice of strategies for this inquiry.

Strategies of Inquiry

Qualitative Research

Research design choice has a profound impact on the outcomes of a study. However, where does one start to decide which direction to take in research? Greenblatt, Dickinson, and Simpson (2004) suggested that the research questions point to whether a qualitative or quantitative approach to inquiry is warranted. With the primary research question, I was aiming for an in-depth understanding of the human experience within an online learning environment to inform eLearning strategies from design to delivery. The secondary research question pertained

to learners' perceptions of what they felt they had learned about CPCP or IECPCP and applied as a result of their participation in the eLearning workshop. The notion of trying to understand various perspectives about factors, ideas, and intuitions that emerged from learners' experiences in a very particular context implied that the proposed study was best suited to a qualitative approach to inquiry.

Qualitative inquiry, however, can be defined in many ways. Tesch (1990) suggested that "it is useful to take 'qualitative' literally and consider qualitative research as any research that uses qualitative data. Qualitative data is any information the researcher gathers that is not expressed in numbers" (p. 55). For Atkinson, Coffey, and Delamont (2001), qualitative research has the ability to display multiple interpretations of studied events. Similarly, Wolcott (1992) proposed that qualitative approaches to inquiry "are ways to conceptualise human social behaviour and to describe and analyze it" (p. 37). These "ways to conceptualise" mentioned by Wolcott are derived from verbal and non-verbal communication as well as other types of personal interactions between the investigator and research participants such as observations, interviews, and written correspondence (Stein & Short, 2001).

Conducting qualitative inquiry does not directly imply a particular approach to data collection, analysis, and interpretation rather it opens the door to a myriad of research strategies (Atkinson et al., 2001). Although there are some commonalities in terms of definition and characteristics between the various qualitative techniques used by investigators, there are also distinctions. The direction chosen in qualitative research—the way techniques are administered, combined, and directed—will drastically change the way human experience is portrayed and interpreted and this direction is closely linked to the investigator's own belief system. Because of my assumptions about knowledge and this study's theoretical framework, namely the choice of a

socioconstructivist paradigm, an emergent interprofessional perspective as well as Vygotsky's sociocultural theory, I chose to conduct a qualitative intrinsic case study. This type of study had the potential to expose highly intersubjective meanings that represented a view of reality but not reality itself within a circumscribed event.

Case Study

For Yin (2003a), "the case study is the method of choice when the phenomenon under study is not readily distinguishable from its context" (p. 4). Stake's (1995, 2000, 2008) description of the case study brings forth the notion of interest and understanding. According to Stake it is necessary to set aside opinions and presumptions to truly open one's mind to what is happening before hand, be willing to accept a case for what it is, and attempt to describe it in all sincerity. From Stake's (1995) perspective, "we study a case when it itself is of very special interest. We look for detail of interaction with its context" (p. xi).

Stake (2000) explained that a "case study is not a methodological choice but a choice of what is to be studied," (p. 435). The object of a study must therefore correspond to the criteria of a "bounded system"; that is, a case must possess a certain level of novelty while still presenting common issues (Smith, 1978; Stake, 2008). For this study, an integrated system was created from the moment the eLearning workshop was imagined until the workshop was offered. Because the process of designing, developing, and delivering an eLearning workshop was an event that occurred for a set period of time and with the various participants operating in a well-defined context with clear boundaries, this study occurred within a bounded system. Furthermore, the intent of this study was to explore the processes and experiences in relation to one IECPCP eLearning workshop. The case study examined the processes and experiences from the potential learners', the production team's, and the workshop participants' point of view. Using a

sociocultural approach meant that the experiences reported by every study participant were intertwined with each aspect of the workshop production process. For example, the workshop participants' self-reported learning outcomes were linked to the pedagogical structure of the workshop, the online environment, and the learning community itself, thus fitting Yin's criteria for a phenomenon indistinguishable from its context and Stake's bounded system.

Merriam (1998) speaks to the uniqueness of a case study in terms of the type of information it can provide about a social phenomenon and explained that "case study is a particularly suitable design if you are interested in process" (p. 33). Stake's (2000) view differs on what should be examined with a case study design and discouraged the use of this qualitative approach to examine process. In another difference of opinion, Yin (1994; 2003a, 2003b) insisted that good case study design must rely on a well-defined hypothesis. Stake (2008), on the other hand, discouraged the use of hypothesis and insisted that case studies should be inductive, use interpretive methodology, and be guided by research questions. In addition, others like Wolcott (1992), criticised case study design as a nondescript research strategy that merely represents a way to interpret data. Nonetheless, I believe that the eLearning workshop developed in this study—the process, the people, and the program—presented a unique opportunity to explore what happens in a particular virtual environment with a level of sensitivity that cannot be achieved through quantitative methods alone. Choosing a case study design with an interpretive qualitative approach allowed for an intersubjective interpretation of the design, development, delivery, and evaluation of an IECPCP eLearning workshop.

However, as many writings pointed out, it is important to first identify the type of case study that will best address the research questions (Cresswell, 2007). Stake (2008) defined three types of case studies that he termed *intrinsic*, *instrumental*, and *collective*. A case study is

intrinsic if it seeks a better understanding of a phenomenon of interest, instrumental if its main focus is to understand the bigger picture, and collective when there is an agglomeration of more than one case study. This case study can be defined as intrinsic because the main focus is to come to a better understanding of one particular phenomenon. The case itself is of interest and this study seeks out the experience of those living within it. This intrinsic case study was aligned with complementing research strategies that respected the socioconstructivist paradigm and Vygotsky's sociocultural theory.

Overview of the case

The intrinsic case study explored the design, development, delivery, and evaluation process of one IECPCP eLearning workshop, a process that took 14 months to complete (July 2005 to September 2006). The six-week French-language online IEPCCP workshop titled: "Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail" / "Applying the principles of interprofessional education in the workplace [translated]"³³ was designed, developed, and delivered in collaboration with the Consortium national de formation en santé (CNFS) – volet Université d'Ottawa.

I chose to partner with the CNFS because they had expressed an interest in developing an online continuing education workshop about collaborative practices in healthcare. The CNFS was willing to provide the funds needed to produce the workshop and committed to offering the learning workshop on an annual basis at no cost to the participants, and to continually update and modify the workshop as needed. Moreover, the CNFS was recognised in French-language healthcare communities across Canada for offering high-quality online continuing education. I could leverage the CNFS' reputation, marketing strategies, and client base to invite healthcare

³³ To facilitate reading, the workshop titled "Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail" is referred to as the "IECPCP workshop" throughout the text.

providers to register in the workshop. Because I was working for the CNFS at the time, I had designed, developed, and periodically delivered over a dozen online workshops and had already established a positive working relationship with The Center for E-Learning at the University of Ottawa, the CNFS' partner for developing online workshops. The Center for E-Learning afforded me the ability to create customised multimedia applications within WebCT³⁴, the workshop's management system, by providing the services of instructional designers, graphic artists, programmers, filming crew, and professional narration services. I had first hand knowledge of the CNFS' target clientele and could rely on previous experience and satisfaction surveys to guide some of the pedagogical choices that I made. For example, the learners were scattered across Canada and worked in very diverse health and social care settings. Face-to-face training was not a feasible option from an economic standpoint and online synchronous activities did not correspond to the learners' need for accessible training regardless of which time zone they were in Canada, and was not respectful of their work and personal schedules. ELearning through asynchronous activities was thus an educational approach chosen to address the specific needs of this healthcare-based clientele. Consequently this intrinsic case study was influenced by my professional relationship with the CNFS (i.e., established registration process, technical support services, content validation by colleagues), The Center for E-Learning (i.e., type of media chosen, course management system used, interactive activities that were developed), and the workshop clientele (i.e., facilitation strategies that were appreciated in previous workshops, requests for a flexible activity calendar, desired length of the workshop).

³⁴ WebCT is a course management system that allows for the easy delivery of the eLearning workshops. WebCT includes a number of tools that can be used to facilitate communication and promote interaction between learners (e.g., discussion forums, email, and chat), while allowing course designers the flexibility to integrate video, pre-programmed animations, and interactive activities.

Targeted participants

This study targeted three groups of participants for a total of 31 participants. These participants served as informants during the course of this intrinsic case study and together they produced 41 data sources.

The first group of participants were potential learners who had registered in at least one of the three most recent CNFS workshops I had facilitated and who were willing to provide their ideas about what the structure, content, delivery, and service should be for an eLearning IECPCP workshop aimed at preparing CPCP educators. These learners were francophone or francophile healthcare providers in Canada who were practitioners, educators, trainers or managers. Six informants chose to participate in the needs analysis and the information they provided influenced the initial design of the IECPCP workshop.

The second group of participants were members of the production team for the IECPCP eLearning workshop and were employees of the CNFS or The Center for E-Learning. These individuals provided retrospective feedback on the design and reflected on the workshop's development process in relation to the workshop participants' comments. The three central members of the production team agreed to take part in interviews after the workshop ended and their thoughts were instrumental in constructing meaning from the learners' experiences and informing further workshop development.

The third group of participants comprised learners who registered in the IECPCP eLearning workshop. The targeted participants in this group were francophone or francophile healthcare providers from any discipline who were involved in practice, education, training or

management and were in a position to influence the adoption of interprofessional practice in either the academic or clinical settings. These healthcare providers were invited to register in the workshop through the CNFS' website and communication list and they received an advertisement brochure about the workshop either by mail, email or through their employer (appendix A). Once registered in the workshop, the learners were informed of the study and were invited to participate in the various data collection methods on a volunteer basis. Of the 30 healthcare providers who registered in the workshop (see profile Table 1), 22 participated in one or more data collection methods and producing 32 data sources (see profile Tables 2 & 3). The participants were asked to reflect on the workshop's structure, content, delivery, service, and outcomes and the information provided was used in combination with the data sources from the other two groups of participants to better understand the factors that facilitated and undermined the effectiveness of the IECPCP eLearning workshop.

Methods

Stake (2008) and Yin (2003a, 2003b) suggested that a case study should rely on a mix of data collection methods that correspond to an underlying theoretical framework and research questions. In fact, mixing data collection methods is an approach often used in qualitative research (Shah, 2006; Stein & Short, 2001), and particularly in eLearning (Kozma, 2003). This allows for a more rich and multifaceted representation of a phenomenon. Moran-Ellis et al. (2006) argued that the purpose of mixing methods was not to validate a particular data set, rather, they claimed that mixing referred to the process with which different data sets were brought together to create a better and more thorough understanding of a phenomenon of interest.

What follows is a description of the data collection methods developed for this study and presents the chronological order in which they were applied. For each method, the text presents

Table 1

Province	Registrant profile by province n=30 (females)															
	Area of practice				Level of education				Other CNFS		Level of comfort with computers				Main computer*	
	direct patient care	education or training	management or research		college	bachelor or certificate	masters	yes	No*		mod	good	very good	excellent	home	work
Man n=1	1	-	-		1	-	-	1	-		-	1	-	-	-	1
N-B n=9	3	5	1		1	6	2	3	6		3	6	-	-	4	5
Ont n=13	6	5	2		5	4	4	10	3		3	2	5	3	10	3
Qué n=6	3	2	1		-	4	2	5	1		2	2	1	1	4	2
Yuk n=1	-	-	1		-	-	1	-	1		-	-	1	-	1	-
Tot	13	12	5		7	14	9	19	11		8	11	7	4	19	11
															3	24 (3)

*All the participants reported having access to high speed or cable Internet either at work or at home. Two participants reported having 56K dial-up access at home.

Table 2

Province	Learner participation in data collection methods by province n=22 (females) 32 data sources were produced				
	Pre-workshop survey	Temperature check	Post-workshop survey	Post-workshop email	Interview
Manitoba	-	-	-	1	-
New-Brunswick	3	-	1	1	2
Ontario	3	-	2	6	4
Québec	1	-	1	-	3
Yukon	1	1	1	-	1
Total	8	1	5	8	10

Table 3

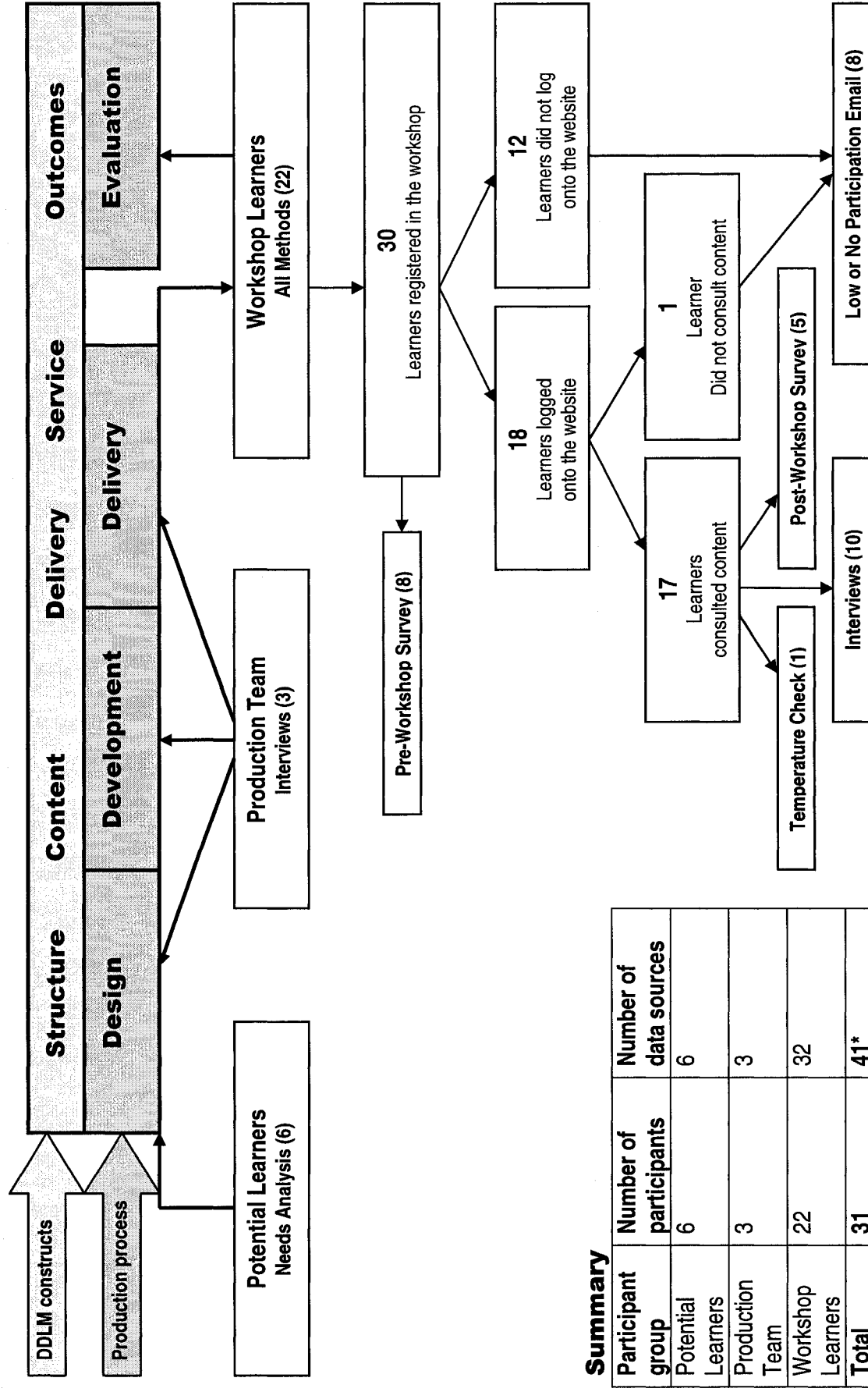
Profession	Learner participation in data collection methods by profession n=22 (females) 32 data sources were produced				
	Pre-course survey	Temperature check	Post-workshop survey	Post-workshop email	Interview
Nurse	3	-	3	4	6
Occupational therapist	-	-	1	1	2
Kinesiologist	1	-	-	-	1
Anthropologist	1	1	1	-	1
Dietician	1	-	-	-	-
Dental hygienist	2	-	-	2	-
Medical technician	-	-	-	1	-
Total	8	1	5	8	10

the particularities, the purpose, and the number of participants who completed them. Figure 12 shows a summary of the number of participants by data source.

Needs Analysis

The first step in this study was to conduct an analysis of the learning needs of the potential workshop participants. I constructed a survey consisting of 20 open- and closed-ended questions that assessed the learners' needs according to the five constructs of the DDLM: content, delivery, service, structure, and outcomes (appendix B). The purpose was to discover what these potential participants wanted to learn about IECPCP and how they wanted to learn about it. I then used the collected information to inform the design of the IECPCP eLearning workshop.

Figure 12: Summary of participants by data source



*Not including workshop records

Using email, I contacted 57 learners who had previously registered in three CNFS online workshop I had facilitated in 2005 and 2006. Twenty email addresses were no longer valid and of the 37 emails that reached destination, 14 former learners demonstrated an interest in participating in the needs analysis. I sent the survey and the consent form by email to those who agreed to participate and six participants completed and returned the documents. Each participant represented a different profession and all were involved in training, education or direct patient care in a hospital setting, a community setting or a university or college. The experience of the participants ranged from two to more than 20 years and together they interacted with over 15 different healthcare providers (see profile Table 4).

Pre-Workshop Survey

The pre-workshop survey was the first data collection procedure I proposed to the participants who were registered in the IECPCP eLearning workshop. This 15 minute survey consisted of 18 open-and closed-ended questions designed to collect basic demographic information and information about the participants' expectations of the IECPCP eLearning workshop (appendix C). I organised the questions according to the five constructs of the DDLM—content, delivery, service, structure, and outcomes—and added questions about the learners' perceptions of computers and online learning. The purpose was to make the workshop as responsive as possible to the learners' needs, thus allowing me to make immediate adjustments if needed. I used answers from the survey to verify if the workshop, which was based on the needs analysis, corresponded to the expectations of the participants who had registered in the workshop. I also used the answers to guide the facilitation process and dictate the type of information the learners would require to maximise their participation in the workshop.

Table 4

Needs analysis Participant profile n= 6 (5 females and 1 male)										
profession	Workplace setting		Area of practice		Number of years of experience				Team members	
	Hospital	Community	University College	Training or Education	Direct patient care	0-5	6-10	11-20	>20	Clinical educator Counsellor Educational psychologist Healthcare aid Manager Nutritionist Nurse Paramedic Physician Psychologist Radiologist Resource teacher Respiratory therapist Social worker Student
Nurse	X			X	X				X	
Medical radiation technologist	X			X	X		X			
Paramedic			X	X		X				
Occupational therapist			X	X	X		X			
Speech language pathologist		X		X	X			X		
Social worker			X	X		X				
Total	2	1	3	6	4	2	2	1	1	

I asked learners who agreed to participate in the study to complete the survey prior to engaging in the workshop activities and gave them the choice of completing the survey by email or online within the eLearning workshop itself. Eight learners chose to complete the pre-workshop survey and together they represented five different professions. Four learners were involved in training and education, two were involved in direct patient care and two were involved in management or research. The learners practiced in either a hospital setting (n=2), a community setting (n=3) or a university or college (n=3). The experience of the participants ranged from two years to over twenty years of experience and together, they interacted with over 17 different healthcare providers (see profile Table 5).

Temperature Check and Online Communication

When the workshop had been in progress for three weeks (the midpoint of the planned workshop schedule), I asked the participants to complete a “temperature check”, which consisted of a 10 minute online survey about their experience in the workshop so far. I integrated the survey into the workshop’s activity schedule. I informed the learners of the temperature check before they began the workshop, I wrote a note on the WebCT entry page when it was time to complete the survey, and I embedded a reminder within the activity pages of the workshop and the discussion forum. The temperature check comprised 20 questions relating to content, delivery, service, structure, and outcomes of the workshop (appendix D). I devised 19 questions according to a 5-point Likert scale asking participants to choose from one of the following statements: strongly disagree, disagree, agree, strongly agree, not applicable. The survey then finished with one open-ended question. This survey corresponded to the continuous feedback loop proposed by the DDLM and the results indicated which modifications to the workshop I could immediately make to better meet the learners’ needs.

Table 5

Pre-workshop survey											
Participant profile n= 8 (females)											
profession	Workplace setting			Area of practice			Number of years of experience				Team members
	Hospital	Community	University College	Training or Education	Direct patient care	Management Research	0-5	6-10	11-20	>20	
Nurse	1	1	1	2	-	1	-	-	3	-	Administrative personnel Dental assistant Dentist Dietician Healthcare aid Government personnel Managers Nurse Occupational therapist Pharmacist Physician Physiotherapist Psychologist Recreologist Social worker Student Support personnel
Dental hygienist	-	1	1	1	1	-	1	1	-	-	
Kinesiologist	-	-	1	1	-	-	1	-	-	-	
Dietician	1	-	-	-	1	-	-	-	-	1	
Anthropologist	-	1	-	-	-	1	1	-	-	-	
Total	2	3	3	4	2	2	3	1	3	1	

One learner completed the temperature check online, while nine learners submitted their comments on their progress by either posting a message in the discussion forum or by sending me (as the facilitator) an email.

Post-Workshop Survey

In the last activity in the workshop, I invited the learners to complete, on a volunteer basis, a 20 minute online post-workshop survey. The 45-question survey covered the five constructs of the DDLM: content, delivery, service, structure, and outcomes (Appendix E). I devised 42 questions according to a 5-point Likert scale, asking the participants to choose from one of the following statements: strongly disagree, disagree, agree, strongly agree, not applicable. I posed the last three questions of the survey in an open-ended format. This method provided a preliminary overview of the learning process and offered a first glimpse into the learners' perspective of the workshop. The data also informed the interview process that followed the survey by highlighting areas where in-depth discussion could provide more information on the learners' experiences.

I provided information about the post-workshop survey in the course information package sent to the learners prior to starting the workshop and they were reminded on the WebCT entry page to complete the survey after they had finished all of the desired workshop activities. I also included the survey in the last unit of the workshop and I posted an invitation to complete the survey in the discussion forum. Finally, I emailed the survey to the learners at the same time as the invitation to participate in the post-workshop interview. Two learners completed the post-workshop survey online. Three learners returned the completed post-workshop survey by email.

Low or No Participation Email

Based on previous experience, I anticipated that a number of the registrants would not connect to the IECPCP eLearning website because there were no registration fees or formal learning credits. I had experienced this with previous CNFS workshops in which up to a third of the learners would not access the online workshop they had registered for. For this study, I sent an email comprised of two open-ended questions to the 13 learners who registered in the IECPCP eLearning workshop but did not log on to the website or only logged on to the organisation page but never consulted any content pages. I considered these learners to be non-participants in the workshop. In the first question I asked “What are the challenges that prevented you from participating in this workshop?” In the second question I asked, “What are the facilitating factors that could help you participate in this workshop?” Eight learners consented to participate in the study and returned their answers. The purpose of the questions was to better understand the learners’ views on what could impede or facilitate participation. This data provided me the perspective of a specific group of healthcare providers that were part of the case but were not involved in the workshop.

Workshop records

With the advent of eLearning, researchers rapidly recognised that one of the benefits of conducting studies online was that the entire transcripts of the learning resource and of the interaction of learners with online activities was available for the researchers to analyse (Davie, 1988). In the intrinsic case study that is the subject of this paper, I included workshop design and development materials as well as workshop emails and messages posted by learners about their eLearning experience in the analysis. In addition, I used the ability to track online activity through various WebCT features to determine how many times learners logged on to the website,

the number of postings they either read or wrote, and how often they visited the various content pages included in each unit. The purpose of examining workshop records was to strengthen the exploration of the design, development, delivery, and evaluation process of the IECPCP workshop.

Post-Workshop Interviews with the Learners

When the last learner had completed the desired workshop activities, I invited, by email, the 17 learners who had participated in the workshop to take part on a volunteer basis in in-depth, semi-structured interviews (Fontana & Frey, 2000) (see Table 6). I considered learners to be active workshop participants if they had logged on to the website and had consulted at least one content page. I used the DDLM constructs, content, delivery, service, structure, and outcomes to guide the inquiry and also invited participants to discuss any issue relating to the workshop that they believed was important (appendix F). I scheduled the interviews for 45 minutes each and conducted the interviews by telephone or in person according to the participants' preference. Although Creswell (2003) recommended that semi-structured interviews be completed in person to enable the researcher to observe the participants' informal and non-verbal communication, a study by Sturges and Hanrahan (2004) revealed that telephone interviews could yield comparable data quality. With the participants' permission, I audiotaped the interviews and transcribed them verbatim. I then returned the transcripts to the participants for verification. The purpose of the interview was to discover the learners' experiences with the eLearning workshop. The interviews provided a richer and more complete understanding of the learners' experienced realities than was possible with the pre-workshop survey, the temperature check, and the post-workshop survey.

Table 6

Post-workshop interviews with learners Participant profile n=10 (females)			
Pseudonym	Clinical setting	Area of practice	Comments on participation
Annette	Primary care community hospital	Director of professional practice	- Joined seven days after the workshop started - Consulted the introduction pages and the first unit on three separate occasions - Did not read or post any messages in the discussion forum - Stopped before completing the workshop – conflict with planned vacation
Sophie	Primary healthcare community clinic	Director	- Joined the workshop in the month of August - Consulted all of the content pages units 1 through 6 and actively participated in the discussion forum - Produced a concept map as well as an action plan (posted 2006-09-15)
Roxanne	University – Nursing	Clinical professor –oversees clinical supervision	- Joined two days after the workshop started - Consulted the introduction pages and the content pages of first three units on eleven separate occasions - Did not read or post any messages in the discussion forum - Stopped before completing the workshop– conflict with MBA course
Nicole	Tertiary care center in mental health	Director of the occupational therapy department	- Joined two days after the workshop started - Consulted all of the content pages from units 1 through 6 and actively participated in the discussion forum - Produced a concept map as well as an action plan (posted 2006-08-10) and continued to follow the discussions until the end of the workshop without posting any messages
Vickie	Primary care community hospital.	Specialised clinical nurse – responsible for geriatric projects	- Joined 11 days after the workshop started - Consulted all of the content pages from units 1 through 4 and part of the content pages for units 5 and 6 and participated in the discussion forum - Completed the themes for her concept map
Cassandra	Cardiac rehabilitation clinic University - Human kinetics	Clinician in human kinetics and Responsible for clinical placements	- Joined 11 days after the workshop started - Consulted all of the content pages from units 1 through 6 - Did not read nor post any messages in the discussion forum
Joanne	Primary care community hospital.	Clinician in occupational therapy – mental health	- Joined 21 days after the workshop started - Consulted the introduction page and some content pages of the first three units on three separate occasions - Did not read nor post any messages in the discussion forum
Justine	Community healthcare center	Clinician in nursing	- Joined the first day the workshop started - Consulted every content page from unit 1 through 6 and participated actively in the discussion forum - Completed the brainstorming for her concept map
Lise	Primary healthcare community clinic	Clinician in nursing – Consultant in personnel training	- Joined eight days after the workshop started - Consulted every content page from unit 1 through 6 and participated actively in the discussion forum - Produced a concept map as well as an action plan (posted 2006-09-17)
Melanie	Primary care community hospital	Specialised clinical nurse – Responsible for perinatal projects	- Joined the first day the workshop started - Consulted all of the content pages from units 1 through 4 and part of the content pages of unit 5 and participated in the discussion forum - Completed themes and some categories for her concept map and devised a plan

Post Workshop Interviews with the Production Team

I invited the members of the production team I worked most closely with to participate in in-depth, semi-structured interviews after the learner interviews were completed. The two subject-matter experts and the instructional designer agreed to take part in the interviews (see profile Table 7). These interviews represented the last source of data I collected for this study. The DDLM constructs and the learners' comments guided this part of the inquiry and I invited the participants to comment on any issue they thought was relevant to the structure, content, delivery, service, and outcomes of the IECPCP eLearning workshop (appendix G). I scheduled the interviews for 45 minutes each and conducted the interviews in person. I audiotaped the interviews with the participants' permission and transcribed them verbatim. I then returned the transcripts to the participants for verification. The purpose was to capture production team members' perspectives on some of the emerging issues advanced by the learners during their interviews. The interviews with the production team revealed a different view on the issues raised and highlighted by the learners.

Data Interpretation

There are different ways to approach data interpretation and the process is complicated when the data is collected in a different language (French) from the one in which it is disseminated (English). The problem of translation thus needed to be addressed first in the data interpretation sequence.

According to Temple and Young (2004), if a constructivist perspective is adopted, "then translators *must* also form part of the process of knowledge production." (p. 164). Because the theoretical framework of this intrinsic case study was anchored in relative ontology and

Table 7

Post-workshop interviews with production team Participant profile n=3 (2 females & 1 males)				
Pseudonym	Level of education	Clinical experience	E-Learning experience	Expertise
Laura	Master's in Nursing Bachelor in education	Primary care hospital Community care	- Developed one online workshop - Adapted many online workshops - Facilitated online workshops for five years	- Strong French language writing skills - Multiple clinical experiences
Carole	Master's in speech language pathology	Tertiary care hospital	- Adapted a series of three online workshops - Facilitated a series of three online workshops for two years	- Recent clinical experience - Grounded in the clinicians' realities
Louis	Master's in education with specialisation in instructional design	n/a	Designed and developed eight online workshops or courses related to healthcare with <i>The Center for E-Learning</i>	- Knowledge on concept maps - Previous experience in designing for the healthcare field

intersubjective epistemology, meaning derived from the data was a co-construction of a unique reality that was the reflection of the shared experiences between myself as the researcher, and the participants (Rapley, 2001). This joint intersubjective epistemology needed to be respected and I was in the best position to translate the data from French to English. A sociocultural position meant that I was bound to search for meaning equivalence by paying “close attention to cross cultural meanings and interpretation” (Temple & Young, p. 168). Although I inherently shared cultural similarities with the participants in the study, it must be recognised that the translations reflect my personal understanding and interpretation of what the participants’ meant. Because of this intersubjectivity, I have provided both the original and translated versions of the quotes used in this thesis in appendix W to allow readers who are fluent in both languages to examine the interpretations I made.

Once I resolved the problem of data translation, I followed Stake’s (1995, 2000, 2008) guidelines for interpreting the data collected in this case studies. I started the process by writing a detailed description of the case followed by the compilation of descriptive statistics from the close-ended survey questions, which included demographic information, Likert scale-based items, and online activity (e.g., the number of times learners logged on to the workshop or the number of messages read and posted). The purpose was to examine the frequency of responses provided to the questions and identify outliers. The outlying responses became disconfirming instances to which I attempted to provide an explanation for the differences in opinion based on other data sources. In Stake’s view, commonalities between data sources are interesting but exceptions can reveal issues of greater interest.

I conducted an interpretive analysis of the interview data and the open-ended questions from the various surveys to understand meaning in the reported comments and shared

experiences (Denzin, 2001; Russell, 2007; Schwandt, 2000). Stake (2008) instructed the case researcher to select themes or issues prior to the start of the case study and then to seek patterns of data to develop these themes. I chose to adopt the constant comparison method proposed by Glaser and Strauss (1967) to help identify patterns of similarity or difference between the various data sources. Although the constant comparison method, as presented in the context of grounded theory, also seeks to identify relationships of causality between events and themes (Dey, 2007), this was not the focus of this study. Constant comparison merely provided a tool to classify the data into categories and descriptors in order to develop the themes of this study as recommended by Stake.

Creswell (2003) provided some insight about how to begin interpreting interviews and suggested reading and rereading one interview to “obtain a general sense of the information and to reflect on its overall meaning.” (p. 191). When comparing the interview to the other data sources, it became apparent to me that learners’ comments mainly related to the constructs of the DDLM model or outcomes of the IECPCP framework because these formed the themes of interest I identified at the outset of the study. As recommended by Stake (2000, 2008), these themes informed the data collection methods such as the surveys and interview keys, and the data collected served to further develop these themes. Thus, I analysed the data using a top-down/bottom-up approach (Bogden & Biklen, 1992; Erickson, 2004; Hummel, Paas, & Koper, 2006). This meant that I read and reread the whole corpus of data to find text that fit within the themes advanced by the DDLM and IECPCP models (top-down) and these became the categories for analysis. In a confluent process, I also searched the data for new categories that differed from the model and framework used in the study (bottom-up). I then searched the data sentence by sentence to find common descriptors for each category. I drew and redrew a code

map outlining the descriptors for each category (Anfara, Brown, & Mangione, 2002). The code map evolved as I read more sentences from the transcripts and found more descriptors. As I drew the code map and analysed the data, I compared and contrasted the descriptors and categories within and between each data source, causing me to constantly reorganise the code map. This recursive process of coding, classifying, cross-checking, and reorganising data until the end of the analysis led to a coherent set of categories and descriptors that was verified by one representative of each participant group. As is customary for a qualitative case study (Stake, 2008), I continually searched the data for disconfirming instances and alternative explanations, which entailed a reorganisation of the code map where needed. I then linked the categories together through triangulation³⁵ to provide a rich, detailed, and comprehensive account of the factors that facilitated and undermined the effectiveness of the IECPCP eLearning workshop. I reported this account through rich and thick description³⁶ in the narrative form using the lens of socioconstructivism and interprofessionalism.

Ethical Considerations

Glesne and Peshkin (1992) stated that research participants should feel that they can trust the researcher to inform them about the study, maintain their anonymity and do no harm. What is distinctive in qualitative research is that participants aren't truly participants but, as expressed by Brogden and Patterson (2007), they are more like co-researchers or co-explorers and the researcher is more akin to a research tool. With this shift in hegemony, ethics in qualitative research is reflected in part by the way researchers manipulate data to reflect as accurately as

³⁵ According to Stake (2008), triangulation refers to the "process of using multiple perceptions to clarify meaning" (p. 133). For case studies, the researcher triangulates key observations and compares the various data sources as a basis for interpretation.

³⁶ Rich, thick description is "providing enough description so that readers will be able to determine how closely their situations match the research situation, and hence, whether findings can be transferred" (Merriam, 1998, p. 211).

possible what the participants are trying to communicate, while being sensitive to issues of confidentiality, secrecy, and power.

As suggested by Baez (2002), I dealt with the position of power I held as the researcher and the research instrument of the study by recognising and acknowledging its presence. In fact, Brookfield (2005) explained that the most well-intentioned acts to liberate participants from the power relationship are fruitless since power can never be dissipated, but only acknowledged. According to Foucault (1982), the impression that one can choose when and how to wield power is only an illusion. Making adult participants aware of the existence of a power relationship and letting them decide how to contend with this fact is part of the power democratisation process.

To help participants contend with the power differential in this study, they were able to choose freely whether they wanted to contribute to the research process and decide if this was a worthwhile endeavour for them. Not only was this study approved by the University of Ottawa's Social Sciences and Humanities research Ethics Board (appendix H), but four documents were produced to provide information to potential participants about the study and provide them with the opportunity to choose if they wanted to participate. One information and consent form was developed for the needs analysis (appendix I); a second for the pre-workshop survey, the temperature check, the post-workshop survey, and the workshop records (appendix J); a third for the low or no participation email (appendix K); and a fourth for the interviews with the learners and the production team (appendix L). In addition, exposing verbally (to the production team) and in writing (in the needs analysis invitation and on the website) my own social and cultural position as an educator, a healthcare provider, and a researcher with the individuals involved in the case helped build a relationship of trust (Pitts & Miller-Day, 2007) so they could freely make an informed decision about their participation. It was also paramount that participants feel

confident that their contribution to the study would be held in the strictest confidence.

Accordingly, the answers to the various surveys were confidential, anonymous, and pseudonyms were associated to the interview data.

One of the salient features of this study was my position as an active participant in the case study. Not only did I act as the workshop designer, developer, and facilitator, I was also the investigator. As described by Labaree (2002), this insider position provided me with privileged information of the minutest details of the case and led to a deeper understanding of the inner workings of the design, development, delivery, and evaluation process of the IECPCP eLearning workshop. It is undeniable that my own participation in the production and facilitation of the eLearning workshop was an integral and influential part of the research process. I believe that this insider position strengthened the accuracy of the interpretation of the data but it also made it possible to introduce biased information stemming from my established working relationship with the three participant groups. In accordance with an intersubjective epistemology, the data collected was thus a reflection of both the learners' perspective and my own. I was deeply committed to making the IECPCP eLearning workshop a success according to the learners' expressed needs and actively invited participants to candidly share their experiences. Furthermore, by honestly documenting and weaving my perceptions about IECPCP and eLearning throughout this thesis, I exposed my researcher, educator, and healthcare provider agendas. In Wolcott's (1994) opinion, clearly stating one's position and views enables readers to make their own inferences about the data and thus leads to an ethical account of the phenomenon under study.

Trustworthiness

While we as researchers trust ourselves to conduct the research process ethically, the real question is whether others can trust us. The question of validity or what many term trustworthiness in qualitative research has continually surfaced in the field of social sciences (Sinding & Aronson, 2003). Smith and Deemer (2000) argued that validity and trustworthiness were incongruent with relativist ontology. Others such as Merriam (2002) and Cho and Trent (2006) argued that validity is not a personal choice but a general research requirement of today's society. In fact, there are as many strategic variations that can be used to strive for trustworthiness as there are writings on the subject.

I chose to follow the writings of Lincoln and Guba (1985) on the subject of trustworthiness which stated that the extent to which the findings of a qualitative inquiry are worth paying attention to rests on four criteria: 1) credibility, 2) transferability, 3) dependability, and 4) confirmability. Lincoln and Guba provided clearly outlined criteria and presented a strong basis from which to explore trustworthiness. Because these criteria were developed in the context of ethnographic study whereas this inquiry was an intrinsic case study, I merged some of the authors' claims about trustworthiness with the complementary writings of Stake (2000) and Merriam (1998) on the subject.

The first criteria, credibility, can be evaluated in terms of prolonged engagement with the phenomenon under study, persistent observations, and triangulation³⁷. The purpose of prolonged engagement is to build an understanding of the cultural particularities of the phenomenon under study and to build trust with the participants. I had six years experience as an insider in the design, development, delivery, and evaluation of eLearning continuing education workshops

³⁷ Moran-Ellis et al. (2006) stated "triangulation is an epistemological claim concerning what more can be known about a phenomenon when the findings from data generated by two or more methods are brought together" (p. 47).

with the partners chosen for this study (CNFS, The Center for E-Learning, targeted community of learners). Furthermore, the data collection for this study occurred over a period of 16 months (July 2005 to November 2006). This allowed complete immersion in the process and allowed me to make meaningful contact with the participants in the study.

Persistent observation means detailed focus on issues at hand. All of the data collection methods were structured to tackle the elements of structure, content, delivery, service, and outcomes with the IECPCP eLearning workshop. This created redundancy within the data collection system, allowing different perspectives on similar elements to surface. However, when new issues arose through one data source, redundancy was built into other data sources. For example, the issue of participation and motivation first arose through the workshop records and was further explored through the learner interviews, the production team interviews, and the low or no participation email.

Triangulation uses multiple sources with different methods to explore different points of view of the phenomenon under study. I used triangulation to contrast and compare the data collected through persistent observation. This intrinsic case study relied on eight data collection methods (needs analysis, pre-workshop survey, temperature check, post-workshop survey, low or no participation email, post-workshop interviews with learners, post-workshop interviews with the production team, and workshop records), which produced 41 different data sources, from three different groups of participants. Triangulation served to expose confirming and disconfirming instances between methods, the data sources, and the group of participants to provide a holistic and credible understanding of the eLearning IECPCP workshop.

The second criteria, transferability, relates to the extent to which the conclusions of the study can be applied to other situations. Wolcott (1994) stated that it is up to readers to make

their own inferences, yet it is the researcher's responsibility to present the data in a way that enables the reader to come to their own conclusion. In this study, rich and thick description of each aspect of the design, development, delivery, and evaluation, and the inclusion of the various participants' voices throughout the process provided the basis for readers to make their own decision about transferability.

The third criteria, dependability, pertains to the extent to which a study could be reproduced and yield similar results. It is related to both credibility and triangulation. Overlapping different data collection methods through triangulation increases accuracy in the analysis. As already explained, the data from this study was obtained from different data collection methods and sources representing different views of the same experience. In addition, direct quotations were used when possible to preserve the voice of the participants and increase authenticity. Nilan (2002) added that reflexivity and a critical review by the researcher of the process followed to analyse and interpret data also contributes to consistency and dependability. The recursive and constant comparison process used for data analysis, as well as the member check of the coding tree, integrated reflexivity and critical review into this study.

The fourth criteria, confirmability, relates to the ability to verify the original data sources and the process that was followed to do so. The methods used in the study and the manner in which the data was interpreted were explained earlier in this chapter. Moreover, summaries of the raw data are presented in table format in the appendices and the coding tree is explained in the chapter on findings. I kept an audit trail showing how I determined categories and descriptors, and I stored all raw data, transcripts and notes in a secure location.

Conclusion

This chapter presented a reflexive look at how the study was theoretically framed, how data was collected, and how it was analysed. It also explained how the study contended with ethical considerations and trustworthiness, and outlined the measures that were taken to apply best practices in qualitative case study design.

Chapter 4

Findings

Introduction

The findings of this intrinsic case study are presented in three sections. The first section outlines the findings from the needs analysis survey. The second section uses workshop records to explain the process that was followed to design, develop, and deliver the IECPCP eLearning workshop. The third section examines the eLearning experience by integrating the findings from the pre-workshop survey, the temperature check, the post-workshop survey, the low or no participation email, the relevant workshop records, and the post-workshop interviews with the learners and the production team.

The data analysis revealed that the participants' comments and answers to the various survey questions could best be organised according to the five constructs of the DLLM: structure, content, delivery, service, and outcomes. These five constructs became the categories of the analysis for all of the data sources. An additional category called "participation" emerged during the analysis of the workshop records and the interviews with the learners. Within each of the six categories, the data was organised into descriptors, which were dictated by the data itself. This formed the data interpretation code map (figure 13).

The data was allotted to each category based on the research questions. The participation category grouped data that related to the learners' intrinsic factors. The structure category included issues relevant to the design portion of the workshop. The content category included data that was connected to the texts (written or audio) linked to the different activities. The delivery category included issues that could only come into play once the workshop was offered. The service category included data describing the responsiveness of the facilitator and service

personnel. The outcomes category considered any self-reported examples of CPCP knowledge, skills, attitudes or practices. Although the categories are distinctive concepts, in some instances a descriptor may apply to more than one category. However, the organisation of the code map represents the organisation of the data that I judged most appropriate based on the intersubjective interpretation of the data sources.

Figure 13: Code map

Categories	Descriptors	Categories	Descriptors
Structure	- Time factors - Interactivity - Community - Pedagogical strategies - Documentation of learning - Media - Usability	Content	- Comprehensiveness - Authenticity - Relevance - Language
Delivery	- Facilitation - Flexibility - Accessibility - Technology	Service	- Learning organisation - Technical support - Responsiveness
Outcomes	- Knowledge - Skills - Attitudes - Practices	Participation	- Motivations - Expectations - Learning preferences - Satisfaction

The code map of categories and descriptors was devised through a constant comparison process. The code map results from the analysis of all data sources.

Needs Analysis

This needs analysis addresses one of the requirement of the DDLM's construct of structure. The needs analysis entailed consulting a group of study participants that represented potential learners of the IECPCP eLearning program (see figure 12). The information provided by the potential learners as well as the lessons I learned from previous eLearning workshops with the same group of targeted learners guided the design of the IECPCP eLearning workshop. The summary of the findings in relations to the first research question is presented in appendix M.

Structure

The results from the closed-ended questions of the needs analysis survey suggest that the participants believed they understood and valued the interprofessional approach to healthcare. In contrast, the examples they provided and the language they used in the open-ended question of the needs analysis survey reflected a multiprofessional approach. For example, participants equated an interprofessional approach with team meetings during which each healthcare professional informed each other of his or her goals and progress with the patient. Participants did see a need to improve CPCP in the workplace, and suggested that the following topics be covered in the workshop: improved communication about the patient and between each team member; better definition of roles, discussion about scope of practice; improved work relationships; and common training highlighting interprofessional success stories. With regard to design, the participants advised that the workshop not extend beyond six to eight weeks, and be separated into small blocks of content. They emphasised that the workshop needed to be applicable to a diverse group of healthcare providers and include personal accounts and concrete examples.

Content

The participants revealed that their healthcare team likely knew what interprofessional practices were yet some alleged that healthcare providers weren't necessarily applying these practices, despite this knowledge. The terms interprofessional collaborative patient-centered practice (CPCP) and interprofessional education for collaborative patient-centered practice (IECPCP) were not familiar to these participants. Participants proposed that the following topics be included in the workshop: collaborative approaches; communication strategies in a team-based environment; techniques for discussing roles and responsibilities; and information on how

to teach, stimulate, and evaluate interprofessional practices. They suggested adding a topic about best practices to the workshop to help learners develop a culture of collaboration in their workplace. One survey participant advised avoiding content that required in-depth analysis.

Delivery

The participants stated that eLearning was an appropriate approach to teach IECPCP, although one participant was concerned about the lack of personal contact in online workshops. The participants requested a multimodal approach to learn about the content. They suggested that video presentations, discussion forums, documents, questionnaires, and exercises would help deepen their understanding of the subject matter. Two survey participants proposed that healthcare teams should be encouraged to participate in the workshop as a group. They requested the presence of a facilitator and felt that this person's role should be one of expert in the field of IECPCP or resource person able to provide guidance on the implementation of CPCP in the workplace. According to the participants' comments, the facilitator should be a mediator as well as a guide to encourage, motivate, and provide feedback on learner participation. Finally, the results of the needs analysis showed that 30 to 90 minutes was an acceptable range of time to spend online at any one time. One survey participant stated that she preferred completing the entire workshop in only a few blocks of time of perhaps half a day, to a full day. The participants specified that they would access the workshop mostly from home and in some cases from work.

Service

Two survey participants wanted clear instructions about how to navigate through the site and on the use of various communication tools (discussion forum, email, etc.). Another participant requested online and telephone support. Participants asked that the workshop respect the work-life realities of healthcare providers such as distance, travelling, and lack of resources

(financial, time, replacement personnel, etc.). They suggested that healthcare providers did not have time to complete a lengthy workshop and access to the eLearning site had to be flexible to accommodate different work schedules. Finally, participants requested that the workshop be applicable to all types of healthcare settings.

Outcomes

Participants wanted to be exposed to success stories and strategies and explore how to apply the lessons learned in their workplace. They also wanted to learn how to stimulate and motivate change toward CPCP practices.

Workshop Production

Description of the Production Team

Designing a highly interactive and complex eLearning workshop requires a lengthy period of time and a team of professionals (subject-matter experts, educators, instructional designers, programmers, graphic designers, project managers, etc.). I recruited two colleagues at the CNFS to be part of the subject-matter expert team so they could provide their perspectives of the content and help me ensure that the eLearning activities were relevant to the targeted group of learners. I represented the physiotherapy profession and my two colleagues represented nursing, and speech language pathology. We all had experience in online workshop development and were familiar with the targeted group of learners. An instructional designer³⁸ who worked at The Center for E-learning joined the subject-matter expert team to form the production team.

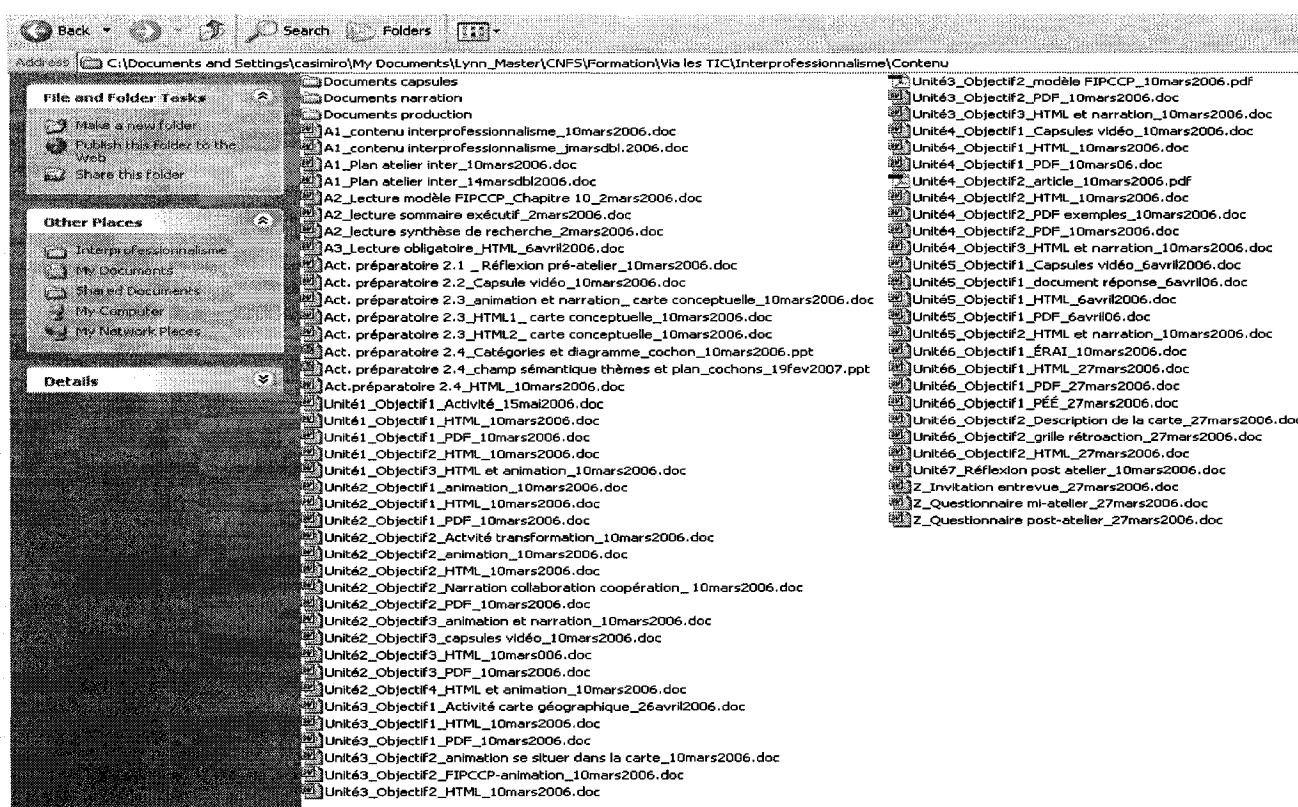
The instructional designer's responsibility was to devise, in collaboration with the subject-matter expert team, the best eLearning strategies given the information provided on the pedagogical framework, the workshop objectives and content, the targeted clientele, and the

³⁸ Instructional designers rely on their knowledge and skill to support effective learning and instruction through the use of technologies (Kim, Lee, Merrill, Spector, & van Merriënboer, 2008).

needs analysis. The collaboration process to determine the eLearning strategies took place in November and December 2005. From January to May 2006, the subject-matter expert team wrote the texts for the activities and the instructional designer coordinated the work of the graphic designers, the computer programmers, the filming crew, and the narrator, and created the website.

My role as the leader of the production team was to organise, guide, and monitor every aspect of the design, development, delivery, and evaluation process of the workshop. In July 2005, I devised the purpose of the workshop, wrote the base content, developed the objectives, and provided the pedagogical framework (appendix N). It was also my role to validate the choices made about the content, the comprehensiveness, and division by units through a revision process with an expert in the field of IECPCP and a healthcare provider. Their suggestions were included in the final draft of the content. Following discussions in November 2005 with the members of the production team, I constructed the initial design of the workshop (appendix O), wrote the first draft of the texts/content pages for the eLearning activities (scripts, narrations, questions, etc.), recruited actors, and organised the production team meetings. In addition to the base workshop content, design, scripts and narrations, I prepared a total of 67 production documents for the workshop (figure 14) between January and May 2006. These documents were revised in terms of relevance, clarity, and use of language by my colleagues on the subject-matter expert team. Finally, from May 18, 2006 to September 15, 2006, I facilitated the workshop.

Figure 14: Number of production documents



Design

The workshop design was informed by Vygotsky's sociocultural theory, and was guided by the DDLM, the IECPCP model, Knowles' andragogical model, the needs analysis, and the production team's previous eLearning experience. With this design framework as a guide, I gave the production team the mandate to help me bring workshop participants toward higher order cognitive and metacognitive learning while favouring the construction of individual knowledge and collective meaning making (Collis & Moonen, 2005; Jonassen, 2002). Learners had to be encouraged to confront their mental conceptualisation with their ladder of inference (Ross, 1994). In other words, through the workshop activities, learners needed to have the opportunity to compare how they perceived how their workplace should function according to CPCP principles and how they perceived their workplace was actually functioning. According to Ross,

this comparison allows learners to identify gaps and incites them to instigate change. The learning activities chosen for the workshop had to extend beyond the limits of the online workshop and enable the participants to define their own workshop outcome with respect to how they would stimulate CPCP in their workplace. The production team had to consider that participants volunteered to take part in the learning workshop, they did not pay to register, and were not financially compensated for their time. Thus, the participants had no obligations to complete the planned workshop activities.

In summary, the design phase relied on creative planning to produce a workshop that was not too time-consuming yet sustained higher order thinking, respected the principles of andragogy and sociocultural theory, and brought participants to think about how to stimulate CPCP in their work environment.

Development

I chose two competencies to guide the participants' learning and thus the development of the workshop. I stated the competencies as follows: 1) Integrate the concepts associated with teaching interprofessional practices, and 2) Stimulate or teach interprofessional practices in the workplace. With the help of members of the production team, I divided each competency into behavioural indicators and then expressed them as learning objectives to facilitate learner comprehension. Each learning activity was chosen according to its relevance to the competencies and was linked to a corresponding objective. We used the revised Bloom taxonomy (1956) (see Anderson & Krathwohl, 2001) to choose action verbs that gradually increased the level of potential cognitive, psychomotor, and affective learning. We developed the objectives to motivate learners through the use of action verbs, help learners interpret learning expectations, and facilitate their self-evaluation following the completion of each activity (Brien, 1997).

I adopted a six-week workshop on a WebCT platform to align with the needs analysis and previous experience with the same target group of learners. I divided the workshop into six independent units. Each unit covered one IECPCP topic and one step of action planning that aimed to enable learners to stimulate CPCP in the workplace. I used a concept map³⁹ as a basis for the planning activity because it stimulates higher order learning and is recognised in the literature as an ideal method for developing new competencies (Scallon, 2004; Tardif, 1992, 2006). Adding the concept map as a primary workshop activity had the potential to help learners integrate the concepts they learned in the workshop and organise their ideas about how they would go about stimulating CPCP in their workplace.

Each unit had a standardised structure to cover a different IECPCP theme and a different step of action-planning:

- Unit 1 – Roles and Responsibilities / Choosing a Goal
- Unit 2 – Definitions / Brain-Storming
- Unit 3 – Interprofessional Education for Collaborative Patient-Centered Practice /
Developing Themes
- Unit 4 – Professional Identity / Developing Sub-Systems
- Unit 5 – Strategies for Teaching CPCP / Drawing a Concept Map
- Unit 6 – Strategies for Evaluating CPCP / Devising a Plan

A virtual and printable workshop calendar of events provided the participants with an overview of the learning activities planned for each unit and suggested a schedule for completing them (appendix P). Nevertheless, learners could choose which activities they wanted to complete and when to complete them, as long as it was within the six-week time frame. The sequence of

³⁹ “The arrangement of major concepts from a text or lecture into a visual arrangement. Lines are drawn between associated concepts, and relationships between the connected concepts are named. These concept maps reveal the structural pattern in the material and provide the big picture” (Ehrlich & Kommel, 2000, ¶1).

information and activities (learning and research) for each unit were always presented in the same order to help participants find what they needed (figure 15):

- The unit objectives and the recommended timeline to complete the unit
- A short introduction to the unit topic with a lead-in to more in-depth content
- One or more application activities (video, illustrations, animations, etc.)
- A discussion about how the unit relates to their particular work setting
- An invitation to complete one more step of the concept map and subsequent plan
- A reminder of the next step in the research study when appropriate

A series of icons were associated with each type of information so that learners could visually navigate through the workshop (Horn, 1989) (figure 16). With use and repetition, these icons became memory cues (Howard, 1987). For example, when the learners saw the icon of the three little pigs building a house (see bottom of figure 15), the learners immediately knew the learning activity was related to building their concept map and action plan.

We carefully chose the multimedia applications to limit the need for large amounts of bandwidth while users were connected to the workshop online because some of the targeted learners were expected to only have dial-up access to the Internet. We evaluated the pedagogical value of each media choice with respect to the competencies and objectives that were developed for the workshop. The media applications had to motivate learners to learn, facilitate the integration of the concepts, and help learners self-evaluate their progress (figure 17 & figure 18). Each unit relied on a short amount of content, no more than one page followed by a number of activities such as cartoons, illustrations, animations with voice-over, video or multiple choice exercises. A question always invited participants to continue their learning process in the discussion forum (figure 19). A short video presentation of the workshop can be viewed at

Figure 15: Sequence of information for each unit

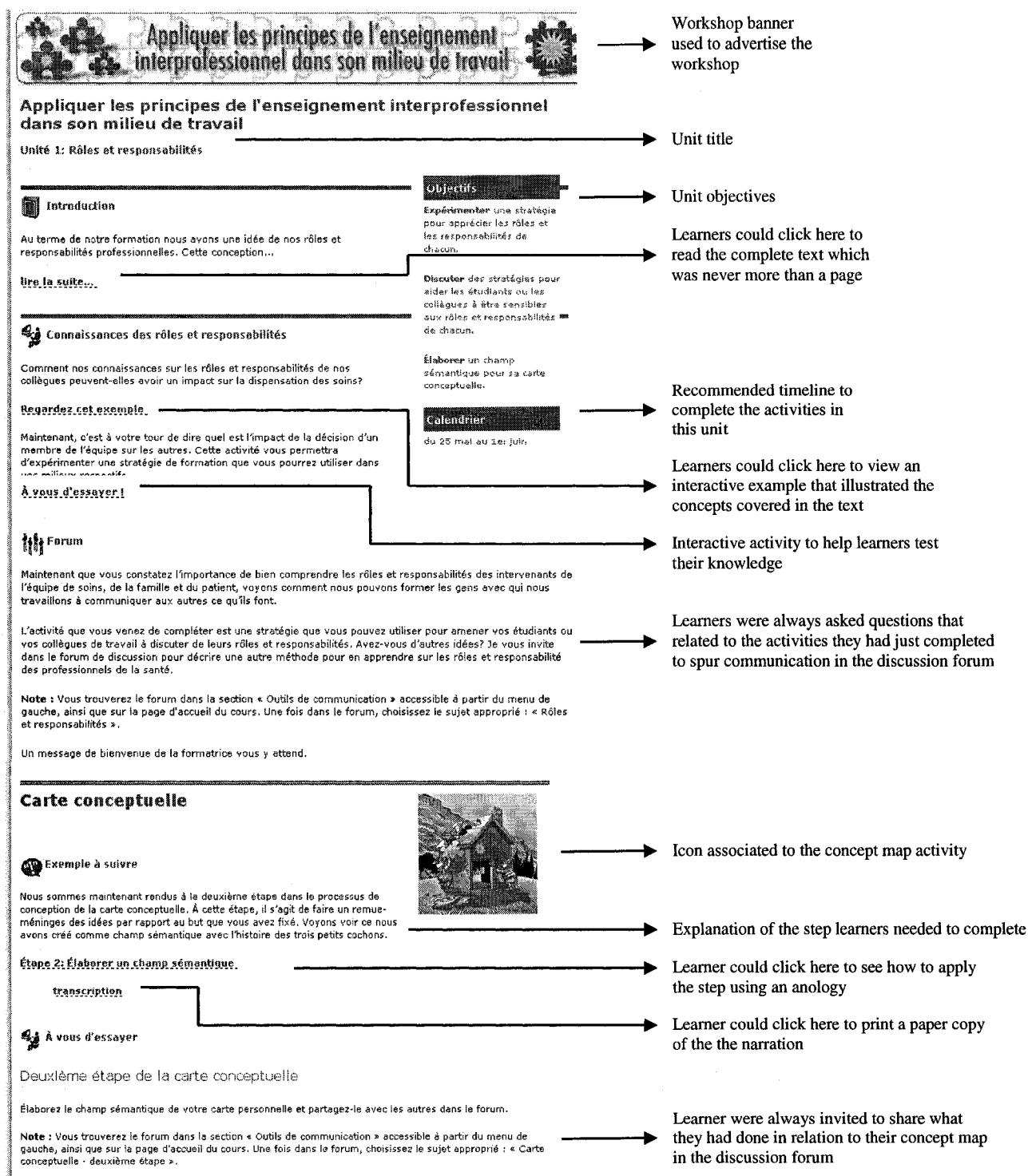
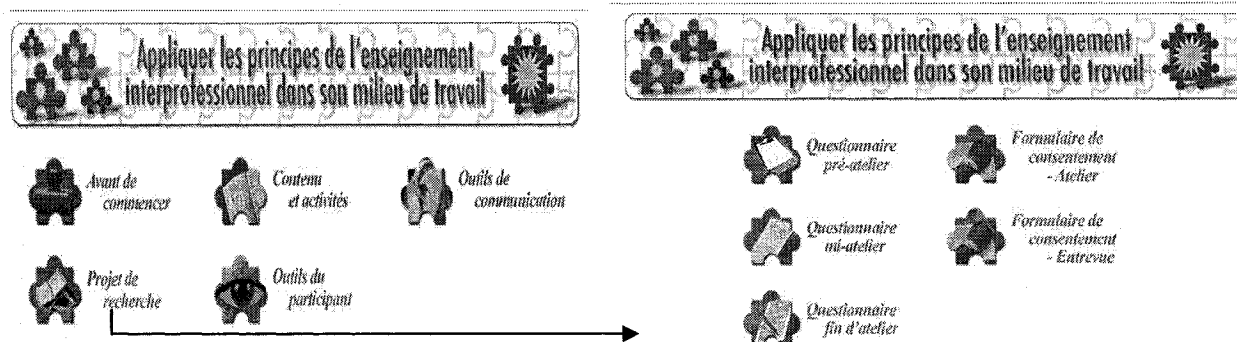
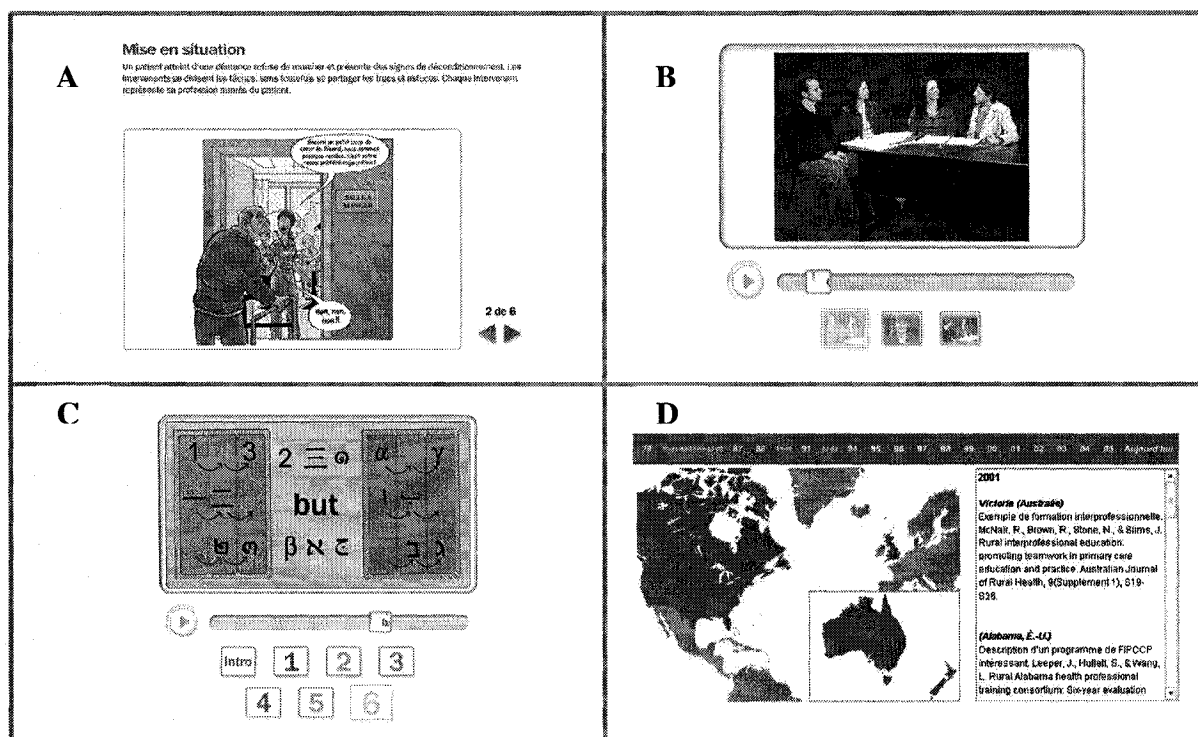


Figure 16: Example of icons



These icons were used on the organisation pages of the workshop and reappeared where appropriate throughout the workshop.

Figure 17: Example of media applications



A: Learners viewed a six-image story that illustrated the difference between cooperation and collaboration. This activity used a practical example set in a long term care facility to help learners better understand the preceding short text that defined cooperation and collaboration.

B: This activity was a series of three videos. In the first video, learners were asked to reflect on how the clinical teacher could act as a role model for CPCP values with her group of students. In the second video, learners were provided with a list of tips to help them devise a strategy. In the third video, the actors played out a potential solution to the initial question. Learners were then invited to share their answers and comment on the proposed solution in the discussion forum.

C: The concept map activity was presented in the introduction of the workshop. Learners were asked to view the animation presented here for an explanation of each step in concept mapping. The animation showed learners how to set a goal, brain storm, group ideas together, find common concepts, draw a map, and devise a plan. At the end of the animation, learners were informed that each unit would cover one step of the concept map activity and that complementary explanations would be provided.

D: Learners were introduced to the literature about IECPCP and CPCP through this interactive map. When learners clicked on the year of interest, the map zoomed in on the countries around the world where significant reports or studies were published. The reference and a synopsis of the publications were also provided.

[illegible]

Step 1 asked learners to choose a goal. For the analogy, the goal was to help the three little pigs avoid the confrontation with the wolf.

Step 6 asked the learners to analyse their map to see where they could act to reach the goal they had set out in step 1. This analysis constituted their plan. In the case of the analogy, it was suggested that if the parents of the three little pigs were taught how to educate their children about the value of collaboration, there would be a strong chance that at the first opportunity, the three little pigs would choose to work together rather than go their separate ways. Using their collective knowledge, all three houses would likely be built out of bricks.

The analogy was thus linked to the concepts covered in the workshop without being specific to healthcare, inciting the learners to be innovative in their plans.


aOIT

AFKS - L'Enseignement Interprofessionnel en milieu de travail

Tableau de bord

Afficher

Options du concepteur

Page d'accueil > Outils de communication > **Forum**

Menu du cours

Page d'accueil
 Avant de commencer
 Contenu et activités
 Outils de communication
 Outils du participant
 Projet de recherche

Forum

Rédiger un message

Rechercher

Paramètres du thème

Cliquez sur le nom d'un thème pour afficher les messages qu'il contient.

thème	Non lu	Total	Statut
Principal	0	3	public, Ouvert
Activité brise-glace!	0	21	public, Ouvert
Carte conceptuelle - étape 1	0	19	public, Ouvert
Carte conceptuelle - étape 2	0	19	public, Ouvert
Carte conceptuelle - étape 3	0	5	public, Ouvert
Carte conceptuelle - étape 4	0	13	public, Ouvert
Carte conceptuelle - étape 5	0	11	public, Ouvert
Carte conceptuelle - étape 6	0	9	public, Ouvert
Carte conceptuelle - descriptif	0	5	public, Ouvert
Unité 1: Rôles et responsabilités	0	7	public, Ouvert
Unité 2: Les approches multi, inter et trans	0	10	public, Ouvert
Unité 3: Le modèle de la FIPCCP	0	5	public, Ouvert
Unité 4: Identité professionnelle	0	15	public, Ouvert
Unité 4: Les éléments facilitateurs et les obstacles à la PCCP	0	9	public, Ouvert
Unité 5: Développer des programmes de FIPCCP	0	11	public, Ouvert
Unité 6: Évaluation de projet	0	5	public, Ouvert
Projet de recherche	0	1	public, Ouvert
Tous	0	167	---

<http://www.box.net/shared/zs2ljumhqq>. The video highlights the structure of the workshop, provides an example of each type of media used and demonstrates how to navigate within the website.

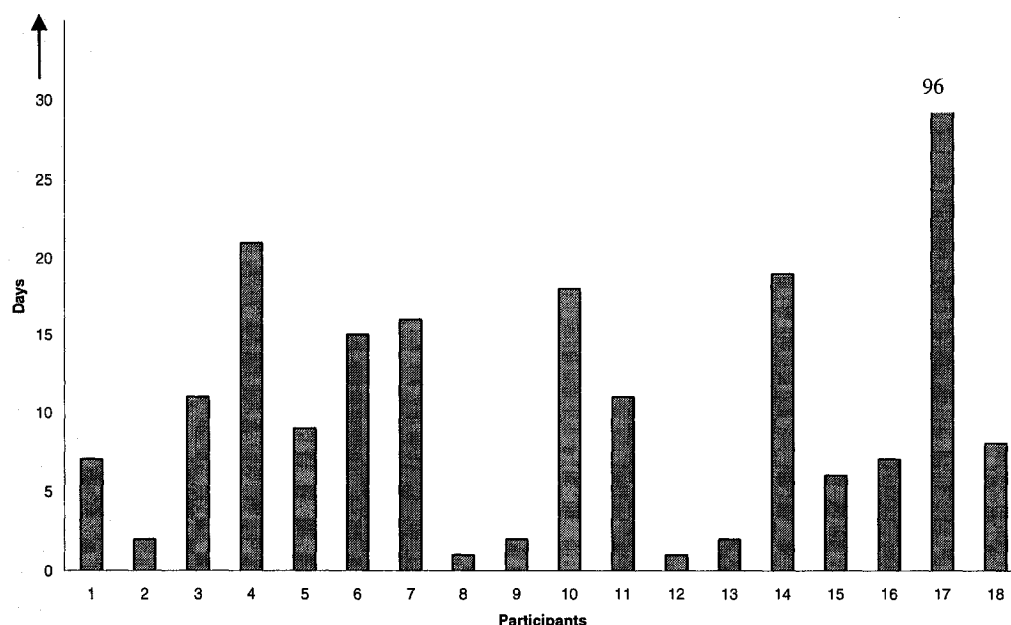
I chose the discussion forum and email as the communication tools because they were asynchronous, better met the learners' needs, and corresponded to the literature on the online communication preferences of healthcare providers (Curran, Kirby, Parsons, & Lockyer, 2003; Bolan, 2003). In my previous eLearning experience, the targeted group of learners for this study had repeatedly reported that asynchronous communication was more practical and feasible since they had varied work schedules, lived in different time zones, and were faced with competing demands on their personal time. These constraints made it unlikely that learners would be online at the same time often enough to participate in synchronous communication activities, such as chatting.

Delivery

I offered the workshop for the first time beginning on May 18, 2006 and scheduled it to run for six continuous weeks until June 29, 2006. Early in the workshop, it became apparent that the learners were struggling to find time to complete the workshop activities. In fact, of the 30 learners registered in the workshop, only 18 logged on to the website, some many days after the workshop started (figure 20). A few learners attributed their difficulties to an unexpected increase in activities at work, while most felt that their familial obligations and summer vacation were interfering with their ability to participate. In response to these constraints, I extended the workshop until September 15, 2006. The learners took advantage of the extension and continued exploring the workshop activities at their own pace. Participation quickly became inconsistent among learners as they participated sporadically in each unit based on their personal schedule

and learning interests. As time passed, learners who had completed the activities that interested them left the workshop until all active participants were finished.

Figure 20: Number of days before consulting the website



Half of the learners logged on to the website the first week of the workshop, while the rest of the learners logged on later. Participant 17 registered late and logged on to the website 96 days after the workshop started.

I facilitated the discussion forum throughout the workshop to stimulate information sharing between the learners and to encourage individual and collective reflections on each theme. For example, I asked questions and requested the participants' opinions at the end of my postings or I targeted certain postings and invited participants to read and comment on the topic of the post. Even with an inconsistent and declining number of participants logging onto the website, navigation within the website showed a high level of activity. For example, the number of times the learners logged on to the website ranged between 1 and 484.

Participation in the workshop varied dramatically among the learners (figure 21 & 22). Of the 18 learners who logged on to the website, 14 completed most or all of the online

activities, 11 participated in the discussion forum posting a total of 164 messages, and two learners chose to share their concept map with other learners.

Figure 21: Continuum of participation in the workshop

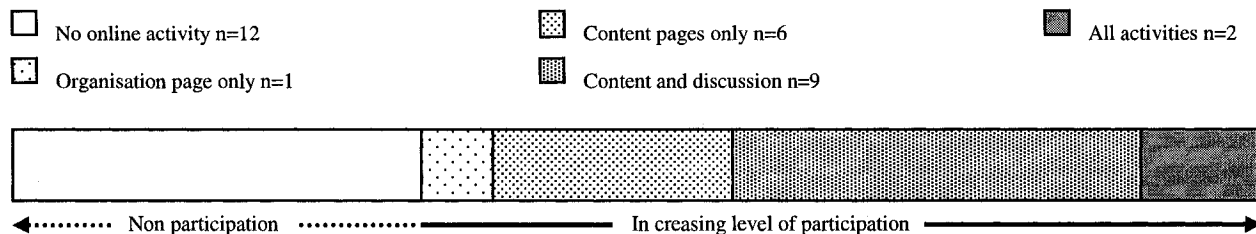
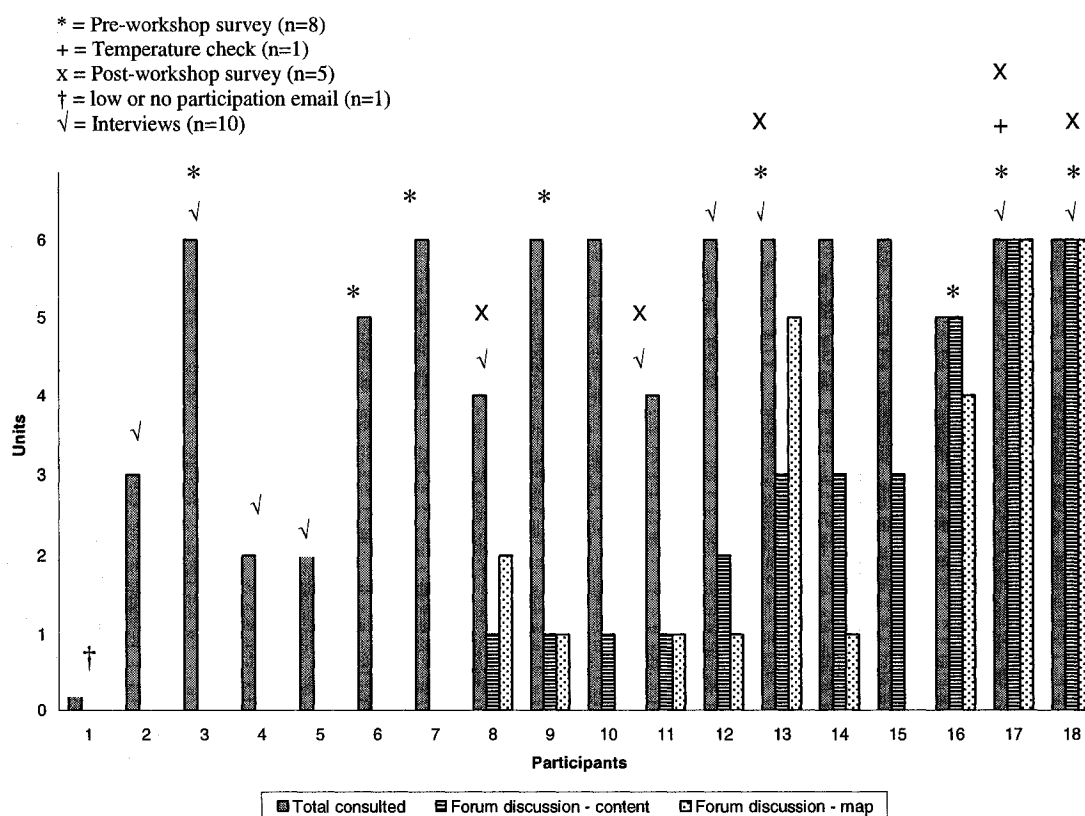


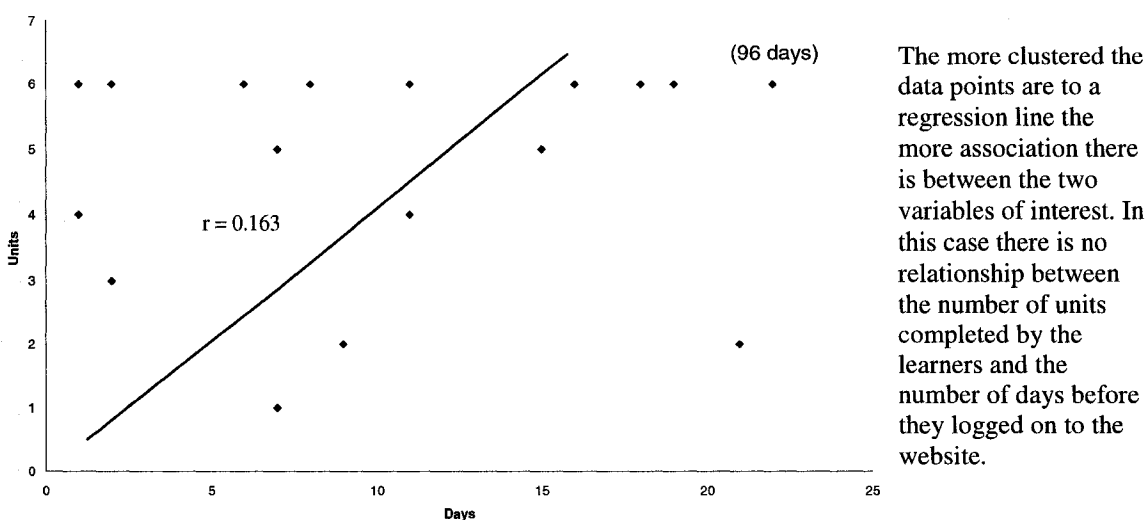
Figure 22: Level of participation in the workshop activities by unit and in relation to the data collection methods



Learners 1 through 7 did not participate in the forum discussions, whereas learners 8 through 18 did participate in the forum discussions to varying degrees. Learners who participated in the discussions tended to complete more units.

Moreover, 15 learners who had logged on to the website completed one or more of the data collection methods of the study. To explore whether the delay in which the learners first logged on to the website influenced the number of units they chose to complete, a Pearson correlation product between these two factors was calculated. The correlation was not significant ($r = 0.163$) (figure 23).

Figure 23: Correlation between the number of days before logging onto the website and the number of units completed



ELearning Experience

This section explores the eLearning experience by demonstrating the interrelatedness of the collected data and highlighting disconfirming instances. The summaries of findings for each data set can be consulted in the appendices: pre-workshop survey (appendix Q); temperature check (appendix R); post-workshop survey (appendix S); low or no participation email (appendix T); post-workshop interviews with the learners (appendix U); and post-workshop interviews with the production team (appendix V).

The integrated findings focus on the interview data, which is used as the continuous thread between the categories. The other data sources were used to support or inform what was

said during the interviews. I have translated quotes presented throughout this section from French to English. The reader may refer to appendix W to view the original quote in French and the corresponding quote in English. The quotes in the text are numbered to correspond with their original language in appendix W.

Description of Interview Participants

Before presenting the findings, it is important to first describe each participant who took part in the interviews (see figure 12). The biographical information for each workshop learner was obtained from the registration forms and confirmed or enhanced through questioning during the interviews. The level of participation in the eLearning workshop was informed by the workshop records (figure 24). No direct references are made to the learners' place of employment or their province of origin. The biographical information for each member of the production team was drafted from personal knowledge of their work-related accomplishments and their role in the design, development, delivery, and evaluation of the online workshop. This information was confirmed or modified through questioning during the interviews. Pseudonyms are used throughout the text to retain anonymity.

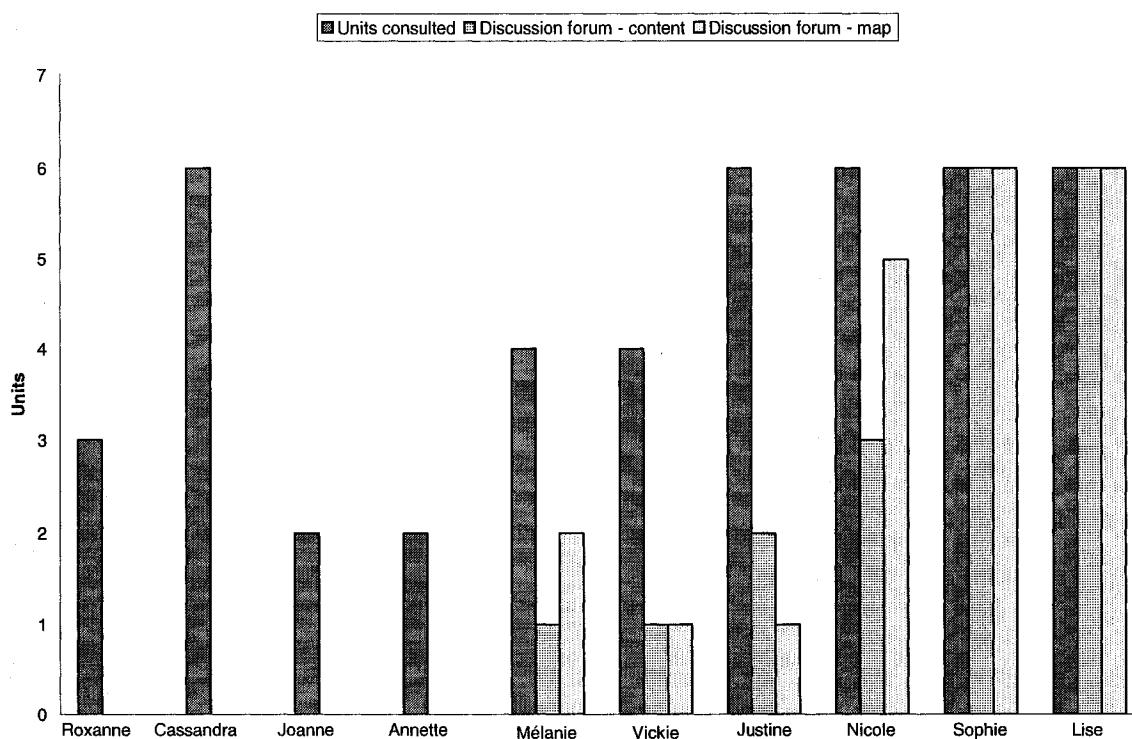
Learners

Annette

Annette was a nurse who worked in a primary care community teaching hospital. She was director of professional practice and guided a group of educators, namely specialised clinical nurses, who were responsible for workplace staff training. Annette had participated in online workshops with the CNFS prior to this study. Annette consulted the introduction pages and the first two units of this workshop on three separate occasions one week after the workshop started. She did not read or post any messages in the discussion forum. Annette withdrew from the

workshop because she had planned a month long trip in Asia and didn't think she could finish all of the workshop activities prior to departure.

Figure 24: Level of participation in the workshop by interviewed learners



Sophie

Sophie was an anthropologist who was director of a new primary healthcare community clinic. She was responsible for the development and management of the clinic and for planning the delivery of French and English language healthcare services. Sophie had not participated in any online workshops with the CNFS prior to this study. Sophie registered in the workshop after it had started and experienced difficulty accessing the website. When the access issues were resolved, she joined the workshop 96 days after the workshop had started. Sophie consulted all of the content pages from units one through six and actively participated in the discussion forum. She produced a concept map as well as a plan to help develop the clinic in a way that would

stimulate CPCP. The final version of her concept map and action plan was posted on September 15, 2006 and can be viewed in appendix X.

Roxanne

Roxanne was a nurse who worked as a clinical professor at the school of nursing at her local university. She was responsible for overseeing the supervision of nursing students during their clinical placements. Roxanne had participated in online workshops with the CNFS prior to this study. She connected to the site on eleven separate occasions in the first two days of the workshop and viewed the introduction pages and the content pages of the first three units. Roxanne did not read or post any messages in the discussion forum. Roxanne withdrew from the program after three weeks because she was pursuing her Master's degree in business administration (MBA) and felt that she could not complete all of the workshop activities while also enrolled in an MBA program.

Nicole

Nicole was an occupational therapist who worked in a tertiary care center in the area of mental health. She was director of the occupational therapy department. Nicole had completed all of the CNFS online workshops developed to date. Nicole joined the workshop two days after it started and consulted all of the content pages from units one through six. She actively participated in the discussion forum and was the first learner to complete most of the steps of her concept map and action plan. Her goal was to help her team members apply interprofessional principles during team meetings. Nicole chose not to draw her conceptual framework but shared her ideas and plan in the discussion forum. Once she had completed all the workshop activities that she wanted to complete, she continued to read all posted messages until the workshop ended, but did not post any new messages.

Vickie

Vickie was a specialised clinical nurse who worked in a primary care community teaching hospital. She was an educator responsible for training nurses and other health professionals in various areas of practice related to the geriatric population. For example, she was responsible for the fall prevention program in her workplace. Vickie had participated in online workshops with the CNFS prior to this study. Vickie joined the IECPCP workshop 11 days after it started. She consulted all of the content pages from units one through four and part of the content pages for units five and six. She participated in the discussion forum and completed the themes for her concept map but did not draw the links between her ideas or write a plan.

Cassandra

Cassandra was a kinesiologist who worked in a cardiac rehabilitation clinic. She also taught human kinetics at a local university and was responsible for overseeing the students' clinical placements. Cassandra had participated in other online workshops with the CNFS prior to this study. She logged on to the website 11 days after the workshop started and returned to the website 45 times until June 18, 2006. She consulted all of the content pages from units one through six but did not read or post any messages in the discussion forum. She did not complete the concept map activity.

Joanne

Joanne was an occupational therapist who worked in a primary care community hospital in the area of mental health. She had not participated in other online workshops with the CNFS prior to this study. Joanne logged on to the website on three separate occasions 21 days after the

workshop started. She consulted the introduction page and the content pages of the first two units. She did not read or post any messages in the discussion forum.

Justine

Justine was a nurse who worked as a clinician in a community healthcare center. She had participated in other online workshops with the CNFS prior to this study. She logged on to the website the day the workshop started and consulted every content page from units one through six. Justine participated actively in the discussion forum. She completed the brainstorming for her concept map but did not complete her map or action plan. She did, however, read all of the posted messages and stayed online until the end of the workshop.

Lise

Lise was a nurse and a consultant in personnel training. She had not participated in online workshops with the CNFS prior to this study. Lise logged on to the website eight days after the workshop started. She consulted every content page from units one through six and participated actively in the discussion forum. She completed her concept map and action plan. She posted the final version of her concept map on September 17, 2006, two days after the workshop ended. Lise's concept map can be viewed in appendix W. Her goal was to help a surgery team she frequently worked with integrate CPCP in their daily work activities.

Melanie

Melanie was a specialised clinical nurse who worked in a primary care community teaching hospital. She was an educator responsible for training nurses and other health professionals in various areas of practice related to perinatal care. Melanie had not participated in online workshops with the CNFS prior to this study, however, she had developed a series of online continuing education workshops with the CNFS that were part of a nursing postgraduate

certificate program in perinatal care. Melanie logged on to the website the first day of the workshop. She consulted all of the content pages from units one through four and part of the content pages in unit five. She participated in the discussion forum and completed the themes and some of the categories for her concept map. She did not complete her concept map but devised a plan to better integrate midwifery in the healthcare teams she worked with.

Production team members

Laura

Laura was a nurse with a Bachelor degree in education and a Master's degree in nursing. She worked for a number of years in primary care hospitals and in community care settings. Laura had developed or adapted many online workshops with the CNFS and had facilitated two workshops on a yearly basis for the previous five years. We had an established working relationship prior to this study. We had worked together on the development of one online workshop, had designed six f2f training programs, and had taught extensively together. Laura's strength resided in her strong writing skills, her teaching abilities, and her varied clinical experience. Laura was a subject-matter expert for the workshop in this study.

Carole

Carole was a speech language pathologist with a professional Master's degree in her field. She had worked in a tertiary care hospital in neurological trauma. Carole had adapted and facilitated a series of three online modules with the CNFS in the previous year. We had worked together on the design of an online workshop prior to this study and had taught one face-to-face workshop together. My working relationship with Carole was less established than with Laura, however, we both shared a passion for effective teamwork in healthcare. Carole had the most

recent clinical experience in teamwork and grounded the team's discussions from a clinician's point of view. Carole was a subject-matter expert for the workshop in this study.

Louis

Louis was an instructional designer with a Master's degree in education in his field. In the previous four years, Louis had worked on the design and development of online education projects with The Center for E-Learning at the University of Ottawa. Eight of his previous projects had been related to healthcare. Louis had worked with Carole on developing a three workshop series for the CNFS. Louis had also taught a course on concept mapping at the collegiate level prior to his employment with The Center for E-learning. We relied on his expertise to coordinate the design and development of the IECPCP eLearning workshop. Louis provided feedback on the pedagogical quality of the workshop and led the technical aspects of developing the eLearning activities and organising the website.

Participation

Four descriptors were found in the data for the participation category: motivation, expectations, learning preference, and satisfaction. From the participants' perspective, motivation related to issues of obligations, time, employer support, financial commitment, personal growth, and official recognition. Expectations related to issues of flexibility, deadlines, and workload. Learning preferences related to the modes of interacting with information such as printed documents, reading or not reading explanations, and face to face versus online educational programs. Satisfaction related to whether learners would recommend the IECPCP workshop to others. The participation category descriptors were derived from the interviews with the learners and the production team and also from the post-workshop email.

Motivation

Many learners had to participate in the workshop during their personal time. They explained that it was difficult to coordinate personal and workplace obligations. Some learners, such as Annette, suggested that a continuing education program offered through an eLearning approach meant that the workshop could be completed on personal time and that this constituted a motivating factor. Annette explained: "It's an advantage for me to be able to follow a workshop after work hours because I can follow it at home or during week-ends ... I don't owe anything to anyone; I owe it only to myself (learner interview)".¹ Joanne provided another perspective that seemed to echo the position of many learners. She criticised online learning for its tendency to encroach on personal time and explained that this dampened her motivation to participate in eLearning activities. She said, "It's clear that I was going to do this workshop on work time and not during week-end leisure time. If I would have had a 2f workshop on Wednesday and Thursday, it would have been on work time (learner interview)".²

Joanne presented her point of view to her employer who accepted her argument that she should benefit from release time to complete the online workshop. Unfortunately, because continuing education budgets at the hospital were cut when the workshop was being offered, she quickly withdrew from the workshop. When asked how she felt about this turn of event, she answered, "Very, very, very hurt ... To have all these little candies removed and to ask us to do more, more, more, I think it's burning the candle at both ends (learner interview)".³ Joanne's remark highlights the importance of employer support as an important motivator to bring employees to enroll in eLearning programs. In Sophie's case, her employer offered release time to complete the workshop and she was one of the few learners who completed the workshop in its entirety. She detailed how employer support facilitated her participation:

- Sophie Half of my time was covered by the employer.
- Investigator So you received release time to participate in the workshop.
- Sophie Yes. I would do it from home, but I would start earlier in the morning before going to work.
- Investigator Was this a facilitating factor for you?
- Sophie Definitely (learner interview)!⁴

Vickie had also discussed with her employer her intentions to register in the workshop. She was told that interprofessional practice was a priority at her hospital and that she could take whatever time needed to complete the learning activities. However, Vickie felt that her employer made an inadequate effort to support her and that was the main reason why she hadn't completed all the workshop activities. She explained the situation as follows:

You know, they tell us: "Yes, yes, yes it's a good idea, block time out and do it!" But, when the time comes, I have to do something elsewhere; I have new deadlines to meet. This doesn't make sense; it's incongruous in my opinion. It follows that if this is a compulsory course for my work, then support me (learner interview)!⁵

As outlined in the low or no participation email, not only did work demands diminish motivation, but other conflicting personal obligations also contributed to some learners' inability to complete the workshop. In her interview, Cassandra explained that she was registered in both a Master's program in cardiac rehabilitation and a Master's program in pharmacology at the time of the workshop. She stated, "It's really what I was doing at the time that stopped me from being able to participate in the workshop (learner interview)".⁶

Learners mentioned in both the post-workshop email and the interviews that because the workshop was offered at no cost and online, they were initially motivated to register in the

workshop regardless of the number of personal and work obligations they had to meet. This format offered the flexibility of withdrawing without penalty and without feeling accountable to anyone. For many learners, the decision to participate once the start date of the workshop approached was based on a personal desire to improve their worklife. There were no course credits or other external motivators to strengthen the need to participate. Justine, for example, described her need for personal growth as her main motivation for participating in the workshop. She said, "I think it's internal motivation that pushes me to follow a workshop like this ... You know, a personal motivation to search for well-being in my workplace, I think that's what it is (learner interview)".⁷

In the various data sources, the learners enumerated a number of extrinsic factors that motivated participation other than the usual financial investment required to register or the need to complete a course to obtain an official recognition such as a diploma or a title. Learners named factors such as meeting an employer's demand for interprofessional practice, satisfying regulatory board requirements for professional development or furthering their career as important motivators. Cassandra contended that she had obtained her job at the university as a clinical placement coordinator because of the online workshops she had followed from the CNFS. The selection committee had revealed to her that although there were a number of desirable candidates, she had obtained the position because of the continuing education she had done on clinical supervision. Cassandra did not complete all of the IECPCP workshop activities and stated that she intended to retake the workshop at a later date because she felt it could be important in furthering her career.

When the production team was questioned about what could be done to increase learners' extrinsic motivation to actively engage in the workshop, they agreed with the changes to the

structure of the workshop proposed by the learners, but they felt they had little recourse with regards to providing extrinsic motivation to increase participation. They believed that the high drop-out rate was part of the reality of a non-credited, continuing education workshop. Louis explained that the leverage for participation is weaker in a non-credited continuing education workshop than for other types of learning programs (credited courses, enrolment fees, mandated by the employer, etc.). Carole construed that participation was connected to the characteristics of adult learners. She expressed, “I think that this is representative of adult learners. It’s no use, we take what we want to take and we don’t feel guilty because we haven’t done it all (production team interview)”.⁸

Expectations

Participation was closely connected to the learners’ expectations of the workshop’s workload. The interviews revealed that the learners tended to base their assumptions about how the IECPCP workshop should be structured on previous learning experiences. They appeared to set their level of participation according to the level of congruence between their pre-conceived assumptions about how the workshop should be structured and their interpretation of how the workshop really was structured. For example, some learners enjoyed being able to complete the activities when it suited them, and expected the workshop to be structured in a way that allowed that flexibility. Based on previous eLearning experience, Vickie wanted to complete the learning activities at her own pace and had therefore expected that flexibility would be built into the IECPCP workshop. She knew she could complete the online activities when she wanted to and didn’t have to follow the suggested calendar of events. Vickie confirmed, “I really liked the calendar even if it wasn’t cast in stone because it was flexible and it gave me what I needed to organise myself ... That’s why I like online workshops (learner interview)”.⁹ Sophie, on the

other hand was comparing the workshop with a mandatory certification course she was taking with Health Canada. She liked the fact that, with the certification course, there were strict deadlines to meet and assignments to hand in. She would have preferred similar rigor in the IECPCP workshop. Cassandra was comparing the workload of the workshop with other eLearning workshops offered by the CNFS and was taken aback by the amount of content in the workshop and the complexity of the suggested activities. She had not expected to have to complete a concept map, which was a different learning activity than the ones she was familiar with. Cassandra explained, "When I started, I told myself: "Oh! My God!" I came back to the objectives of this workshop and then I saw that it was a lot bigger in terms of impact (learner interview)".¹⁰

When probed during the interviews, learners admitted that they had not paid attention to the course description before beginning of the workshop. The amount of work required was outlined in the recruitment email, on the CNFS' website, in the advertisement brochure, and in the introduction page of the website. Like many other learners, Nicole was surprised by the workload required. When asked if she had noticed that the workshop had been evaluated at twenty hours of online activities rather than the usual twelve hours and that the promotional material outlined the activities to be completed including the concept map exercise, Nicole exclaimed, "Not at all! I didn't even look at that! (learner interview)".¹¹ Roxanne had a similar experience. She admitted to not reading the advertised course description and decided to register based on the title. However, once she read the introduction page on the website she admitted that the proposed activities did correspond to the course title. She ultimately withdrew from the workshop because she felt the workload was higher than expected and felt intimidated by the concept map activity. She based her assumption about the concept map activity on the

description provided in the website introduction page and did not explore how the activity was organised in the content pages. Nicole explained her reaction as follows: “Well it scared me! I told myself: ‘My God!’ This seems like a lot of work yet it shouldn’t because I take MBA courses ... I don’t know if it’s because it wasn’t clear enough ... but it scared me (learner interview)”.¹²

Vickie provided some insight as to why some learners had decided to not attempt the concept map and action planning activity. She explained that in her case, the concept map made her think of other learning experiences in which she had perceived this activity as being difficult. She therefore anticipated the worst when she saw the activity listed in the workshop introduction page and projected that she would need more time than she thought to complete this particular activity. Vickie explained,

At first it made me think of mind mapping, a concept I had been exposed to before coming here. I understand that concept and that’s why, knowing myself and the way I work, I knew I had to take time for that, to go dig in my knowledge base ... So at one point in time I just set it aside (learner interview).¹³

Other learners shared similar stories and, as a result of the concept map activity, many learners withdrew from the workshop, avoided that content portion of the workshop, or simply chose to not finish the activity.

When I shared these comments with my colleagues on the production team, they were surprised that so many learners had not understood the purpose of the workshop before registering. However, they did understand the learners’ reaction. Creating the workshop had taken us 10 months and yet we expected participants to be able to finish the proposed activities

within the allotted six-week time frame. Laura affirmed that we had not come to this realisation prior to offering the workshop:

That's interesting because it was demanding for the participants and for us during the design phase. In both cases it was demanding and we underestimated that even if we knew ... I think of when we wanted to develop an example for the concept map. It took us a long time, a very long time (production team interview).¹⁴

Learning preferences

Learning preferences were also a factor that influenced participation in the online workshop. For example, many learners wanted to print the course content. They reported that using a printed document facilitated reading and allowed them to share information with colleagues at work. Yet, once the content was printed, learners didn't necessarily return online or complete the activities in the paper format. This was the case for Annette, who reported, "At the beginning of the workshop I connected to the site ... made myself a beautiful, well-organised binder and it stayed there. I didn't go any further (learner interview)".¹⁵

Many learners had a tendency to overlook background explanations leading to the workshop activities and preferred to try immediately completing the required tasks. This led to some comprehension problems and, in some cases, reduced participation. Melanie admitted that she read explanations quickly and looked for information that stood out. Similarly, Vickie didn't initially read all the details about the concept map. She affirmed, "I wasn't too sure what the expectations were ... well I hadn't really looked at the explanations. I was also quite pressed for time. I ended up trying it anyways (learner interviews)".¹⁶

Finally, many learners explained that they preferred learning in a f2f format. They felt that f2f learning maintained their motivation and that it wasn't as easy to stop participating in a

f2f workshop as it was in an online workshop. Justine maintained that the tendency to easily stop participating was linked to online anonymity. She felt compelled to complete activities in a f2f environment because facilitators or fellow learners would notice her lack of participation. However, in the more anonymous online environment, she could quietly pull out of discussions without completing a given activity with the sentiment that no one would notice.

Satisfaction

Learner satisfaction was the last descriptor found under the participation category. The learners' level of satisfaction with the workshop tended to be indicated by whether they completed the workshop and whether they recommended the workshop to co-workers. Learners who completed one unit or more were satisfied and affirmed that the workshop was responsive to their needs. In addition, the more units the learners had completed the more they felt the workshop was useful and practical. Every interviewed learner who had been active on the website stated they would recommend the workshop to colleagues. For example, during her interview, Justine said that she appreciated the workshop and would like to see systematic training toward CPCP in her workplace. She said, "This is really a good workshop ... I would recommend that it be followed by all new employees and that managers adopt this way of functioning ... We need to learn how to work together (learner interview)".¹⁷ However, one learner specified that she would be more inclined to recommend the workshop if the structure was modified. The general sense of satisfaction with the workshop seemed to motivate some learners to find out more about the topic and thus complete more workshop activities.

Structure

The pre-workshop survey reaffirmed the information gleaned from the needs analysis and at the outset the structure of the workshop corresponded with the identified needs of the learners

who had registered in the IECPCP workshop. No last minute changes to the workshop were required. In the temperature check, post-workshop survey, and interview, participants shared many comments about the structure of the workshop. Seven descriptors were used to qualify the structure category: time factors, interactivity, community, pedagogical strategies, documentation of learning, media, and usability. From the participants' perspective, time factors related to issues of length, pace, and time of year; interactivity related to issues of shared learning, communication activities, and personal contact. Community related to a sense of belonging and complementary interests. Pedagogical strategies related to the choice and organisation of the learning activities with particular attention to the concept map. Documentation of learning related to the strategies chosen by the learners. Media related to the choice and mix of eLearning technologies used in the study. Usability related to the website's navigation features, organisation, and functionality.

Time factors

Although the length of the workshop was chosen based on the information gathered in the needs analysis and was planned for six weeks, participants felt that the time allotted for the workshop wasn't sufficient. The learner who completed the temperature check reported that the pace of the workshop was too fast. Three emails and four messages posted in the discussion forum asked me to postpone the workshop due to vacations. In response to the temperature check and the posted messages, an email was sent to all the participants to inform them that the workshop was extended until the end of the month of July. I noticed that participants were slowly proceeding through the units while still being delayed by summer vacation or work-related obligations. I doubted that the learners would finish the workshop by the end of July and decided to extend the workshop until September 15, 2006. This allowed enough time for three of

the learners to continue work on their concept map and finish their action plan. No other problems associated with structure were reported in the temperature check, the emails or the discussion forum.

In the post-workshop survey, two learners mentioned that the length of the workshop was inadequate for the amount of content and activities. This was echoed during the interviews with the production team. Although the team had struggled with the volume of content in the design phase, they didn't realise that volume would also be an issue for the participants. Carole explained, "There was a lot of content for a six to eight week workshop ... If I look at the content we have in our other workshops on clinical supervision, they look minimal compared to what we put into the interprofessional workshop (production team interview)".¹⁸ Louis felt that the parallel workshop structure, which comprised an element of content immediately followed by a step in concept mapping, had been directly influenced by the six-week time frame suggested by the needs analysis and our previous experience. Although we had hoped that the workshop's innovative design would balance out the dense content and short time frame, we were surprised that the learners indicated that the workshop represented more than 20 hours of learning.

When asked during the interviews how many more hours or days were needed to adequately represent the workshop's workload, learners' responses were divided. Some learners didn't want to increase the number of days past six weeks, yet they didn't want to remove any content or any of the learning activities, including the concept map that was used to prepare an action plan. When learners were asked about the possibility of extending the workshop from six weeks to eight weeks they expressed varying responses. For example, Nicole noted that she preferred shorter workshops but did like the idea of a two week extension. She shared the following perspective: "When you get on board, obviously, the shorter it is, the better it is.

However, once you're in the workshop and you realise the work that needs to be done, I think I would welcome two extra weeks (learner interview)".¹⁹ Vickie, on the other hand, seemed sceptical about prolonging the course by two weeks. The advertised length of the workshop had contributed to her desire to register in the workshop. Vickie stated,

I would have liked more than six weeks, yes! Eight weeks? ... Six weeks was a motivational factor for me, in the sense that it's the same as courses offered by universities during the spring and summer seasons, six weeks goes by fast. It's big, it can be intensive, but after that you're finished (learner interview).²⁰

As the interviews progressed, a solution emerged that pleased all of the subsequent interview participants. Learners suggested separating the workshop in two consecutive six-week workshops, each representing 20 hours of training, with only a one week break in between the workshops. They also recommended the workshops be named in a manner that would reflect the progression in learning. One learner suggested using words such as basic and advanced in the titles of the workshops.

Time of year was also a recurring topic in the comments. In the post-workshop survey, two learners mentioned that June wasn't a desirable time of year to participate in a workshop. This was confirmed during the interviews when the learners emphasised that the workshop started too close to the summer season. Joanne explained the reason for her withdrawal this way: "Anyhow, it was also summer with vacations and all that. So I pushed it aside, but it's only after that I realised: 'Ah! I missed something that could have been really interesting' (learner interview)".²¹ As explained by Lise, it seemed to be a busy time of year at work for some participants. She reported, "What I found difficult was the timing. Because for me, it was a time

of year where there was a lot of activity at work, therefore I didn't have a lot of time to dedicate to the workshop (learner interview)".²²

Interactivity

During the interviews, members of the production team voiced examples of shared learning throughout the design and development of the workshop. Laura emphasised, "I learned about the concept of interprofessionalism. Even if I thought I knew what it was, well I certainly had some idea of what it was; now it's much clearer (production team interview)".²³ The team members explained that the ongoing discussions had helped to solidify their understanding of the various CPCP concepts. They stated that this experience supported the collectively expressed need in the design phase for providing opportunities to help learners interact with each other. The interviewed production team members were therefore pleased to hear that the learners had reinforced the importance of embedding communication activities within the structure of the course.

The participants who responded to the post-workshop survey reported that they were provided the opportunity to reflect and to interact with other learners in the workshop. One learner commented that the participation in the discussion forum was erratic and that she would have preferred more rigid deadlines to incite learners to participate in the discussions at the same time. The interviews revealed that the participants valued online interactions and the discussions helped them to understand the content better. Learners compared responses to measure their level of understanding. Lise explained,

Sometimes I would ask myself: "what am I supposed to do here?" Then someone would write something and I would say: "O.K.! Now I think I understand". I could see how the ideas and the concepts were being applied. Your [the facilitator's] comments were also

useful because many of your ideas were well developed and that also helped to make things concrete ... it certainly made the workshop more interesting (learner interview).²⁴

The discussion forum met a need for personal contact and countered the sense of isolation created by the online environment. For some learners, the discussion forums weren't enough to meet this need. For example, Annette suggested that real time (synchronous) activities such as videoconferencing would increase personal contact and would motivate learners. Sophie, on the other hand, highlighted the difficulties with synchronous activities:

For me this is superb. I'm at the end of the country and I write my comments at midnight. I can do this at eight o'clock in the morning; you know you're completely on another schedule. In the case of videoconferencing, when you need to connect in the morning and [someone in another time zone] schedules it at 9 am, well that's 6 am here. I can't participate (learner interview).²⁵

In some cases, the learners lived in a remote community and felt that discussions in an online course provided a window into healthcare related ideas in the rest of Canada. Nicole confirmed that the online discussions helped her to realise that her experiences were similar to those shared by workshop participants who lived in other areas of the country. She went on to say,

I think its fun to see that in essence we're all the same, regardless of the region. There's a saying that when we compare each other, we console each other. Somehow, we realise that we're not off track and its fun to get tricks from other participants that we hadn't thought of before. It really is a mix of ideas (learner interview).²⁶

Although online communications were valued by learners, some did find the process time-consuming. Lise explained, "I find it a little heavy to read everyone's comment. I find it

takes a lot of time, a lot more than if I was sitting in class ... Sometimes I think it's too demanding (learner interview)".²⁷

Community

For some learners, communicating with others made them feel like they belonged to a learning community. They shared the same interests and wanted to exchange ideas and support each other throughout the learning process. Some learners searched for other participants with similar or complementing interests and focused their attention on these learners' postings. Cassandra noticed that with time, a certain familiarity between learners developed and discussions tended to flourish. She stated, "It took a certain time, in fact it took a few modules before we felt: 'Ah! It's the same people that keep coming back.' And then Oops! People discuss more (learner interview)".²⁸

Lise pointed out that the uneven participation made it more difficult to connect with other learners. She did manage to connect with Sophie and they exchanged personal information to pursue their discussion after the workshop ended. She explained,

I would have liked it if there could have been more people, more participants that would have held on until the end. We could see different comments that people posted but as we went forward, we had fewer participants. However, I must say that Sophie was incredible. I really enjoyed reading her ideas and comments, she was a fabulous participant (learner interview).²⁹

Two participants explained during their interviews that they would prefer to team up with one or more co-workers to complete the workshop:

Investigator After going on the website, is this a workshop that you would want to take again?

Roxanne Yes, I would register again, but I would like it if someone else from my workplace took this course with me (learner interview).³⁰

Pedagogical strategies

Concerning pedagogical strategies, the learners commented in all data sources that topics were covered in a pertinent manner. Many learners mentioned that the use of examples and animations to compare cooperation and collaboration helped them grasp CPCP concepts. For other learners, the illustrations of the different models of practice in healthcare were most significant in their learning. In the post-workshop survey all the learners except for one reported that the workshop activities had helped them increase their level of confidence in stimulating CPCP.

Even though the learners asserted that the learning activities corresponded to their needs, in both the post-workshop survey and the interviews they questioned the organisation of the activities. In the post-workshop survey, two learners explained that the parallel organisation of CPCP content activities with the concept map activities were a deterrent to participation. They had difficulty following the two activity streams at the same time. Justine described her experience as follows:

The concept map turned me off, it was too much. Everything that was explained, the small video clips, I found that great. I wasn't ready to do a concept map. I didn't have enough notions, enough knowledge to really go forward. I didn't have a global vision of where I was going with this. So this is the part that unmotivated me; the less interesting part (learner interview).³¹

Louis explained that we, as the production team, had not anticipated that the participants would need so much time to grasp the basic CPCP concepts. We had been led to believe, based

on the needs analysis, that learners were already comfortable with these concepts. The assumption of the production team was that basic CPCP concepts such as definitions of cooperation and collaboration would quickly be understood and would need to be included in the course only as reminders. We had postulated that the learners' would focus on the concept map and the ensuing action plan. Louis contended that the needs analysis had not provided an accurate depiction of the target group of learners and we had therefore overestimated the participants' level of knowledge about CPCP. Louis described his perception of the situation: "We started with the idea that the participants would have a certain knowledge base; that they knew some of the terminology and were coming more for practice than theory, it was supposed to be a review, an update (production team interview)".³²

In terms of pedagogical approach, we had deliberated for almost one month before choosing the concept map idea that I had proposed as one of the main activities of the workshop. Carole thought it was a good fit with the targeted learners of the workshop who were educators and managers. Carole explained,

The workshop was definitely at a higher cognitive level. We were addressing people at the organisational or systemic level who were in the process of implementing interprofessional practices in their group or their department. This is how I perceived it.

So in fact, what we proposed to them, was to do a plan (production team interview).³³

Louis pointed out that the concept map stimulated the development of competencies and fitted within the overall purpose of the workshop, which was enabling participants to stimulate change in their workplace:

We were trying to arrive at an onsite intervention plan. There isn't fifty ways to get there ... The only way to represent this visually is with a concept map. This activity can make

the areas where you can instigate change stand out and this directly helps planning (production team interview).³⁴

Even though as a group we were convinced of the concept map's value, we had not been certain that we could lead participants to develop a concept map within a non-credited, continuing education workshop. This had been my first question to the production team when I had proposed the idea of helping participants develop an action plan using a concept map. As Laura explained, we developed our own concept map using the story of the three pigs. This concept map became a very simple step-by-step example of how to analyse an environment, illustrate the interacting factors, and come up with a plan for change. Laura explained how she became convinced of its pedagogical value as she went through the process of developing a concept map herself:

I never would have thought of this because as I was saying, I didn't know this tool. However, now that I look at this, I say to myself: "What an interesting tool". We don't notice it when we do it; it's after the fact that we see it ... It's fantastic that we started from the story of the three little pigs and then through the story we arrived at the importance of teamwork. If we transfer this to the work setting, there are similar elements. It's interesting that at the end of the activity we ended up with a tool that administrators understand and use—an action plan (production team interview).³⁵

The interviewed production team members explained that they thought that providing one unit of content and directly applying it to the concept map would benefit the learning process and would make the workshop fit within the six-week time frame. They were surprised to find out that this structure had in fact hindered the learning process. Carole felt that the parallel structure we had developed was justified. She stated, "As soon as they had finished a small step we

wanted them to apply it to the concept map because it was a concrete way to finalise their thoughts on the content ... and devise a plan (production team interview)".³⁶ We had therefore chosen a workshop structure that seemed to be difficult for learners to grasp or engage in within the proposed timeline. Louis pointed out that the workshop had to train the learners to instigate change in the workplace within six weeks. In his opinion, there was no choice but to adopt a parallel structure for the workshop between the CPCP content and the action planning:

Investigator: We had chosen to do the concept map concurrently with the content because we wanted to incite them to do it.

Louis: It was also the time they needed to do it in that influenced us; six weeks, that's not a lot (production team interview)!³⁷

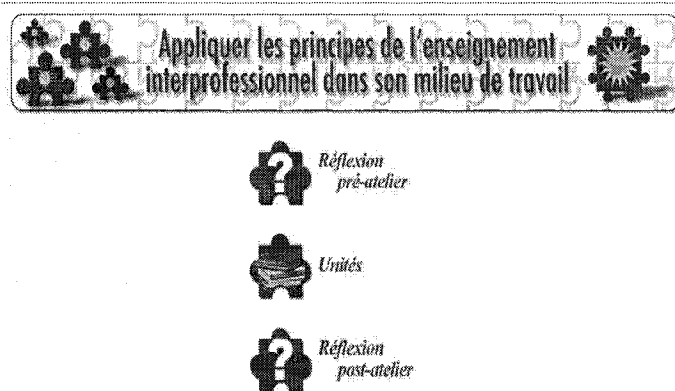
Although many learners perceived that the concept map was an imposing challenge, it did provide a strong sense of satisfaction for those, like Sophie, who completed the activity. She reported, "I like doing diagrams or illustrations to really understand, with zones and links between them. I really liked this (learner interview)".³⁸ Even when pressed, learners insisted that they didn't want to remove the concept map activity. Rather, they wanted the structure of the workshop to change to enable them to gain the necessary knowledge to complete the activity in a timely manner.

Documentation of learning

In the post-workshop survey, learners expressed that they were provided with an opportunity to apply what they had learned during the workshop. The learners expressed that the workshop objectives supported the learning activities. One participant chose "disagree" to the statement "I had the opportunity to self-evaluate". The pre- and post-workshop surveys, which

consisted of 10 close-ended questions about the workshop's content (appendix Y), were part of the workshop's strategy to self-evaluate (figure 25).

Figure 25: Access to the pre- and post- workshop reflection



Learners had to go through this organization page every time they wanted to complete one of the units. They were therefore constantly reminded that there was a proposed pre- and post-workshop reflection activity which was programmed within WebCT's survey tool. In addition, information about the pre- and post-workshop reflection was embedded within the workshop's content page. The questions for the pre-workshop survey were the same as for the post-workshop to give learners the opportunity to self-assess their progress. Feedback on the answers was provided in the post-workshop survey.

When learners were questioned during the interviews about the online activities, none mentioned the pre-and post-workshop reflection. In fact, only two learners had chosen to complete this activity. Rather, learners equated their learning progress with the number of workshop activities they had completed. They also evaluated their learning by comparing their answers to those posted by other participants and the facilitator or by self-evaluating the quality of their work.

Media

The media we chose to incorporate into the workshop were related to the pedagogical strategies employed in the design. Media used in the workshop, such as videos, illustrations, and animations, were well received by learners and helped them understand the theory presented. Justine found that the concepts presented in the texts were complicated and relied on the videos, illustrations, and animations of the concepts to grasp the full meaning of each workshop unit. She provided this example: "There was the text on collaboration and cooperation, but when I saw

how simple it could be with the little video and [the story on] dementia where everyone works together. I told myself: “Well now! It’s so simple!” (learner interview)”.³⁹

In all data sources, the learners reported that they enjoyed the mix of media. Nicole expressed that the media stimulated her to continue the workshop because she wanted to see more of the workshop units. When asked if the learning activities were interesting, she exclaimed, “I was always interested! (learner interview)”.⁴⁰ The learners enjoyed completing the activities and found that the stories used in the activities were realistic. Comments in both the post-workshop survey and the interview generally reflected Vickie’s view:

I liked the exercises that were there and I found the scenarios realistic. It immersed me in the topic. The short video clips, it gives a more visual aspect than if you’re in a didactic classroom ... I was already used to WebCT, therefore the discussions, the feedback, it’s quite efficient (learner interview).⁴¹

Usability

The last group of comments relevant to the category of structure pertained to the topic of usability. Participants stated that they found the site easy to navigate. Annette was quite emphatic on this point:

Investigator What was your first reaction?

Annette My first reaction? I told myself: “Wow! This is well organised! They take us by the hand. We can’t get any easier than this. It’s organised, and it’s structured!” Anyways it seemed like that to me. When I read the first paragraphs, I was able to understand how the workshop functioned.⁴²

In the post-workshop survey, learners generally felt that the website was well organised, uncluttered, and functional. Lise, however, was the only learner who thought that the navigation

was complicated. She said that once she had read something, she said she often found it difficult to find the information again. She also had difficulty navigating between the two parallel activities—CPCP concepts and action planning. It was a challenge for Lise to remember in which unit she could find the explanation for a particular step of the concept map. This is how she described her experience:

I found the navigation difficult. Sometimes I would get lost and I would say: “What’s up? I can work online. I’m not afraid of computers. I work with them all day and I have done online courses before.” I think it was the fact of having the exercises in two parts ... It took a couple of weeks to understand ... I would work on the content and would forget to develop my concept map.⁴³

When probed during the interview, Lise responded that she thought that the table of content was at the root of her problem (figure 26). In her opinion, it wasn’t explicit enough because it only listed the main title of the unit rather than the title of subsections within the unit. Lise explained that because she liked to navigate back and forth, she had to remember in which unit she had seen a particular concept in order to click on the appropriate link.

Figure 26: Content page

Table des matières

1. Unité 1: Rôles et responsabilités
2. Unité 2: Le mouvement vers l'interprofessionnalisme
3. Unité 3: La formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP)
4. Unité 4: Identité professionnelle, éléments facilitateurs et obstacles à la FIPCCP
5. Unité 5: Compétences clés, domaines d'apprentissage et déterminants de la PCCP
6. Unité 6: Évaluation des projets

The content page generally outlined the CPCP content. However, if a learner wanted to reread the text on cooperation and collaboration, it was difficult to find.

When the production team was questioned about Lise’s navigation issue, Louis explained that it was a simple problem to fix and that it should have been avoided in the first place. He felt

that there weren't enough human resources at The Center for E-Learning allotted to the workshop development (programming, graphic design, etc.), and that the workshop had not been reviewed as thoroughly as usual before going online. The production team members all stated that they had underestimated the time needed to produce the activity templates to match the ambitious design. Louis confirmed, "There was the aspect of time, I was more or less doing everything by myself [i.e., programming and graphic design] and there were very few things that I was able to delegate (production team interview)".⁴⁴ Louis also explained that he didn't have access to an experienced programmer. This had caused unforeseen delays and placed undue stress on us (the production team), forcing us to adapt contents at the last minute. He explained, "I simply didn't have time anymore to review things like I normally do (production team interviews)".⁴⁵

Content

The learners provided four descriptors for the content category: comprehensiveness, authenticity, relevance, and language. From the participants' perspective, comprehensiveness related to breadth, depth, density, and appeal of the information. Authenticity related to issues of trust, credibility, and evidence-base. Relevance related to the recognition of previous experience as well as purpose and applicability of the activities. Language related to mistakes and terminology.

Comprehensiveness

In the pre-workshop survey, learners were asked about the advantages and challenges of teamwork in the workplace. The results showed that learners were concerned about the effect that roles and responsibilities, trust, professional barriers, and communication had on teamwork. This information was then matched to the workshop's content to ensure that each one of the issues

raised by the learners was covered. Because the advantages and challenges advanced by the learners had all been reflected in the needs analysis, these topics had already been covered within the workshop and no adjustments were needed.

In fact, a scan of the temperature check, the emails, and the messages posted in the discussion forum showed that learners frequently commented positively on the breadth and depth of the information provided in the workshop, noting that it had helped them grasp many complexities of CPCP. Learners confirmed that the workshop encompassed the topics they wanted to learn about, that the content was presented in a pleasing format, and that it corresponded to their needs. In her interview, Justine maintained that the topics covered were helpful in her daily work activities and said,

I find the courses you offer are well done. They have a great sensitivity with regards to our workplace. They often reflect preoccupations we have and also, the information really supports us to achieve a sense of well-being at work (learner interview).⁴⁶

In all data sources, learners stated that the information was appealing, using an appropriate mix of theory, examples, and activities. A few learners, such as Melanie, mentioned in their interviews the positive role the analogies played in helping them understand difficult concepts. Melanie commented, “It’s excellent to give examples. The example with the three little pigs, I remember that one, how an example so simple can help. It makes us think about reality and how we can translate it into practice (learner interview)”.⁴⁷

When I shared the learners’ comments on the comprehensiveness of the content, Carole and Laura (of the production team) recalled the amount of attention we had given to developing the content to ensure that it reflected a comprehensive array of information. Carole discussed

with me, during her interview, how writing the content had been a recursive process spurred by our own learning process and by the pedagogical needs of the learners. She said,

We presented the information a certain way and then we would change our mind and we would present it another way ... In the end we came up with a depth and organisation of content that we were happy with but we put in a lot of time to get there. There is a lot of time and energy involved in this workshop (production team interview).⁴⁸

Although learners reported that the content was comprehensive, they felt it contained too much information to assimilate at once. Learners frequently proposed that redistributing the content over a longer period of time would resolve this issue. Nicole shared the following thoughts on the quantity of information,

What I can say is if I look at the other courses I took before, it was interesting information but it was easier. This one is more arduous. I'm not saying that it shouldn't be arduous; somewhere we want to learn and change things ... I wasn't prepared for that so it took me by surprise but we must increase the level [of learning]. That for me is appropriate, it's just to adapt it (learner interview).⁴⁹

Authenticity

In all the data sources, learners commented on the authenticity of the content and felt they could trust the information provided. When I shared this information with the production team, they construed that this authenticity was a result of the diverse professional backgrounds and levels of knowledge of CPCP of the production team members. Because our (the production team's) background varied widely, each member was able to contribute to and critique the workshop content in unique ways during the developmental process. Laura and Carole recounted how we continued discussions until the content was applicable to each one of our individual

realities, with the intent that learners would identify with the content as well. Laura and Carole both felt that our method of developing the content applied the principles of CPCP in the way that we effectively communicated ideas, respected each other's point of view, strove to come to a common understanding of the topics presented in the workshop and used joint decision-making to devise creative workshop activities. Laura affirmed that this added to the credibility of the workshop:

Investigator What was the impact of this way of functioning on the workshop?

Laura I think that it added credibility to the workshop. I didn't take the workshop but if I had, knowing and seeing that the workshop was developed by a team in an interprofessional manner, I would have told myself: "Oh! Good! O.K.! This is credible. I feel like getting on board" (production team interview).⁵⁰

The learners also perceived that the content of the workshop was evidence-based and felt that this increased their level of confidence in applying the concepts to resolve problems in the workplace. During the interviews, learners explained that they were more inclined to convince others to adopt interprofessional practices because they knew that CPCP was justified. Melanie contended that she had a better grasp of where the concepts came from and said, "The first thing I noticed was the quality of the references that were given to us. I trusted what was said and I knew these were good resources, for example those from Health Canada (learner interview)".⁵¹

Relevance

The learner who filled out the temperature check did not feel that the workshop content took into account her experience and previous knowledge. However, her opinion had changed in the post-workshop survey and the interview, where she indicated that the workshop seemed

relevant to her experience after all. In general, the learners' responses and comments seemed to indicate that the content was interesting, useful, and applicable to their work situations. Sophie provided the following example: "I liked it a lot when it said the team can be represented by one person ... It allowed me to integrate this in the way we work (learner interview)".⁵²

Two learning activities appeared to be less relevant to the learners. First, in the post-workshop reflection, one learner mentioned she had difficulty understanding the purpose of the post-workshop reflection (self-evaluation activity). She wondered why responses that were based on a four-point Likert scale—agree, partially agree, partially disagree, and disagree—were being graded. Further discussion with Louis revealed that the questionnaire had been inadvertently programmed using the WebCT quiz tool, which graded the responses, rather than the survey tool, which was supposed to provide written feedback. Second, some learners who had not completed the concept map had difficulty fully understanding the purpose of the activity. Justine's comment about her experience with the concept map attests to this perception:

Investigator So you're telling me that it's almost an attack on your self-esteem to ask yourself: "Why don't I understand?"

Justine Yes, and usually I understand. But if it's complicated, it's fun to get to the end and understand. I didn't get there. I find the idea to change the way the concept map is presented excellent (learner interview).⁵³

Learners who did complete the concept map commented that it promoted problem resolution.

Sophie reported she used the map to plan an interprofessional way of functioning in the healthcare center she managed: "I was curious for myself and for its [concept map] application in the case of the new healthcare center that we will create ... It puts into question the way we work, that's where I find this interesting (learner interview)".⁵⁴

During the production team interviews, Carole recalled that we had paid particular attention to try to make the content easily applicable in the workplace. She explained,

It was fun because sometimes we would produce something and one of us would reread it and say: “Oh! No! We can’t leave it like this, it’s not clear enough!” So we would discuss the issue until it was clear. With this approach, I think we arrived at the end with something of great quality and at the level of those who wanted to take this workshop (production team interview).⁵⁵

Language

In all data sources, save for a few noted grammatical mistakes, learners had only one problem with the language used in the workshop and it was in the texts pertaining to the concept map (figure 27). The terminology used to name the steps for creating the concept map seemed to cause most of the apprehension (appendix Z). When asked how she initially reacted to the expression *concept map*, Justine answered, “It was scary. It’s as if the start was too abrupt (learner interview)”.⁵⁶ Melanie initially said that she had not found the language difficult. Later, during the interview, she admitted to having some concerns with the language used in conjunction with the concept map. She suggested, “Words are scary when they are not words that we use daily ... I find it interesting how we always manage to find complicated terms to say simple things (learner interview)”.⁵⁷ Sophie however, felt it was important to learn the correct terms:

I’m in a francophone minority environment, so people, after a while, they use English technical language rather than French terms even if they are Francophone. Therefore, to be exposed to this in French, it’s difficult, but from another perspective, I believe if we don’t name things with the proper words, we’ll never learn them (learner interview).⁵⁸

Figure 27: Explanation provided to participants for the concept map

Le développement d'une carte conceptuelle La carte conceptuelle est une manière efficace d'illustrer nos idées par rapport à un sujet donné. C'est un outil de travail utile et personnalisé. Sa création exige un remue-méninges et elle permet de regrouper des idées en grandes catégories pour ensuite établir des liens entre ces catégories. L'examen de l'ébauche de la carte conceptuelle stimule d'autres idées pour enrichir l'image ou pour vous inciter à réaménager la représentation des idées. La carte conceptuelle vous aidera à passer à l'action; dans ce cas, à l'implantation de l'interprofessionnalisme dans votre milieu de travail. Elle illustre les étapes qui guideront, entre autres l'enseignement aux étudiants, la formation des collègues de travail, la discussion des équipes de soins ou la sensibilisation des gestionnaires, selon votre besoin. Il s'agit d'un exercice exigeant qui nécessite plusieurs ébauches avant d'arriver à un produit logique et cohérent. C'est pourquoi ce travail s'échelonnait sur toute la durée de la formation. Nous vous invitons à vous inspirer des activités d'apprentissage incluses dans cet atelier, des échanges avec vos collègues dans le forum de discussion et des écrits reliés à votre but personnel (que vous préciserez à une prochaine activité). Ce qui importe, c'est que la carte soit spécifique à vos besoins. Bref, la carte conceptuelle est ni plus ni moins un schéma qui illustre le cheminement intellectuel que vous ferez en cours de formation. Ce qui suit est une animation des six étapes à suivre pour vous aider à créer votre carte conceptuelle. Qu'est-ce qu'une carte conceptuelle ?	→ This information was provided in the introduction page of the workshop → Explanation of why the concept map is proposed as an activity and how it will help workshop participants develop a plan → Link which learners could click on to view a narrated animation that explained the six steps for developing an action plan (see figure 15, image C and appendix Z)
Ce que vous aurez à produire au cours des 6 prochaines semaines Pour vous aider à concevoir votre carte conceptuelle, nous avons choisi un sujet simple. Nous avons créé une carte conceptuelle avec l'histoire des trois petits cochons. Au besoin, <u>cliquez ici pour lire un résumé de l'histoire.</u> Nous ferons le lien avec la carte conceptuelle que nous avons créé pour l'histoire des trois petits cochons à chaque unité. Vous pourrez ainsi voir comment nous nous y sommes pris pour faire évoluer notre carte conceptuelle. Voici l'évolution de notre carte conceptuelle de l'histoire des trois petits cochons qui sera utilisée dans toutes les unités de l'atelier. 1. Une des premières versions à la main 2. Version schématisée 3. Version finale, revue par notre graphiste Veuillez noter que dans le cadre de cet atelier, nous nous attendons à ce que vous produisiez une carte conceptuelle qui se situe au niveau des exemples 1 ou 2. L'exemple 3 a été préparé à des fins d'enseignement.	→ Link to the rationale for using the analogy of the story of the three little pigs. → Explanation of the expectations for the concept map exercise. Learners were informed that the final concept map produced for the story of the three little pigs was reviewed by a graphic artist and that they are not expected to produce such images. We provide a hand drawn and power point version as examples.

Laura, Carole and I had anticipated that participants would have some difficulties understanding the theory relevant to the CPCP concepts and the steps for developing a concept map. We made a significant effort to make the terminology accessible. Laura explained the care that we had taken to make the contents understandable and applicable:

You know, this content is quite theoretical and quite abstract. On the one part, I think that we took care to use accessible language and on the other part we tried to make the content as palpable as possible ... In any case, I know the environment very well and if we present something that is too abstract we loose our people, it becomes a burden, it becomes inaccessible and it becomes a barrier rather than an element that will incite them to think that this could be helpful for them. I think that we really had that concern (production team interview).⁵⁹

Delivery

Four descriptors were used for the delivery category: facilitation, flexibility, accessibility, and technology. According to the participants, facilitation related to issues of exchanges with, feedback from and guidance from the facilitator. Flexibility related to when and where they could complete the activities as well as issues of personal prioritization. Accessibility related to under-serviced communities, availability of computers, and firewalls. Technology related to the compatibility between the practical characteristics of eLearning and the participants' needs.

Facilitation

Based on the responses to the temperature check and the posted messages in the discussion forum, learners were generally satisfied with the workshop's facilitation and the opportunities they had to engage with other learners in the online environment. Learners shared examples and commented on each other's answers when the discussion subject pertained to

CPCP content. However, they communicated almost exclusively with the facilitator when the discussion pertained to the concept map.

The post-workshop interviews revealed that the learners felt that as the facilitator, I had provided realistic and relevant examples and respected their opinions. One learner expressed that I had not given her prompt feedback, and had not made her aware of the areas in which she could improve. However, after probing during the interviews, none of the learners reported not having received prompt feedback on their progress. Instead, learners commented on the importance of the formative feedback and guidance I had provided. Justine was one of the learners who explained that she relied on my comments to ascertain her progress. She said, “I find that it’s important. It either confirms that I understood or that I haven’t understood (learner interview)”.⁶⁰ Lise mentioned that it was helpful when I shared personal examples. She explained, “I found that they [personal examples] were applying concepts that we were in the process of learning ... Really, it was a very, very useful tool, in any case, for my learning (learner interview)”.⁶¹

Flexibility

In the pre- and post-workshop surveys, learners reported that flexibility was a main advantage of online workshops. Learners were able to complete the activities at their own pace and to connect wherever and whenever they wanted. ELearning seemed to fit within the participants’ work schedules as well as their personal lives. In her interview, Nicole was clear about her preference for eLearning.

Investigator Did I understand correctly that you would also like to take it in a f2f format?

Nicole Well, I wouldn’t say no, but I’m not sure that I would go. Anyways, I’d be less interested. I don’t feel like going to take a course every Tuesday night

anymore. I like the Internet for that. I do it when I feel like it, during the week or when I want too and I like that very much (learner interview).⁶²

The fact that the IECPCP workshop was non-credited and was offered at no cost provided the participants with the opportunity to easily reprioritize their activities when unforeseen circumstances occurred. This represented another source of flexibility for Cassandra:

Investigator There's a participant who told me: "Listen, when you haven't paid anything, even if it's interesting, it's easy to push it back in the list of priorities".

Cassandra Yes. Well, it was one of the arguments for me to say: "There are priorities that I cannot move. I recognise the quality but at the same time, since there are no costs or penalties, well ... I'll be able to retake it". Yes, it was a factor that helped me take my decision (learner interview).⁶³

Accessibility

In the pre-workshop survey, learners affirmed that the online format provided access to French-language education across Canada. In her interview, Sophie emphasised how eLearning had brought much needed continuing education to outlying or under-serviced communities. She explained, "I work for a remote health network, so we recommend to people to follow distance education (learner interview)".⁶⁴

Still, learners reported that the disadvantages of completing the workshop online were the lack of f2f contact, the need for more motivation to complete the activities, and the potential for technical difficulties. In the post-workshop survey, none of the learners reported difficulty in accessing a computer, and all could either access the learning workshop from home or work.

However, in some cases like Nicole's, firewalls prevented learners from accessing the workshop from their place of employment.

Technology

Participants spoke positively about the technology used for offering the workshop. They contended that eLearning was compatible with the needs of today's healthcare providers. In fact, eLearning was viewed as the next generation of continuing education in healthcare. Annette provided the following comment on the topic: "It's the future; it's where we're going. We don't have another exit, it's nice to say we like the paper or written format but that is not reality. I think it's an evolution that goes with the new generation (learner interview)".⁶⁵

Learners also mentioned that eLearning required more time and effort than with a f2f format because it required self-directed learning. Melanie, who had taught online courses, shared her opinion on the impact technology can make on learning:

You will learn as much as you want to and as much as you push yourself to, in other words, learning belongs to you. I realised in my online courses, that the learning totally belongs to the students. We offer them activities, we offer them suggestions but it will always come back to the learner. When you're in a classroom, you can control what they learn because you're the one who gives it to them. But when they have to learn in an active way, who knows what they learn. In the end, they go get as much or as little as they want (learner interview).⁶⁶

Service

Three descriptors were found for the service category: learning organisation, technical support, and responsiveness. According to the participants, learning organisation related to perceptions of quality; technical support related to password issues, technical difficulties, and

resolution of technical problems; and responsiveness related to the speed of response from the facilitator, administrative personnel, and technical support system.

Learning organisation

Learners who had participated in previous online workshops offered by the CNFS viewed the learning organisation as a provider of quality training. In her interview, Sophie said, “You know, the CNFS it’s not just anything. It’s true! It’s not like doing something that is vaguely known. Yes, it’s recognised, it’s an organisation that has a good reputation ... for quality online training in French (learner interview)”.⁶⁷ In the post-workshop survey, one learner expressed that she wished the CNFS could help secure employer support to facilitate the learning process. She also expressed that the CNFS was providing a valuable service by offering recurring annual continuing education workshops at no cost.

Technical support

The pre-workshop survey revealed that the majority of learners felt relatively comfortable with computers and many had participated in online courses before. This resulted in few requests for technical support, except for some password problems for three learners. One learner was not able to access the website the day the course started. She immediately communicated with the person responsible for registrations at the CNFS and the course facilitator. She did not communicate with the person responsible for technical support. There was an error in her password and this was corrected within 24 hours.

A background check into registrations revealed that two more participants did not have access to the workshop, but they did not request any support. When I contacted these participants, I discovered that in one case, access to the workshop had been given to another learner from a previous CNFS workshop with the same family name. In the other case, Sophie’s

case, access had simply not been created for her. Once this participant received the workshop access information she experienced a few technical difficulties with her home computer. The participant communicated with the person responsible for registration at the CNFS who was away on vacation. The participant chose to wait until this person returned from vacation rather than communicating with me or the technical support team. Once her technical issue was resolved, this participant began the workshop 96 days after it started and completed every workshop activity.

It was intriguing that only one of the three participants who didn't have access to the workshop contacted the CNFS for technical support. During the interviews, other participants expressed having experienced technical difficulties (e.g., difficulty downloading software) but they resolved the problems on their own or with the help of colleagues or family members. For example, Lise explained that she couldn't access the workshop from home. She would return to work in the evenings to access the workshop. When asked why she didn't contact technical support, she replied,

I don't know what it was, I could, at some point in time, have communicated with the technician to see if they could fix this and I'm certain they would have been able to ... If I really wanted to work on something at home, well I would send myself the document I had been working on by email (learner interview).⁶⁸

Responsiveness

In the post-workshop survey, learners stated that as the facilitator, I responded quickly when a suggestion was made with regards to the workshop or when information was requested. One learner emphasised that my willingness to extend the workshop on more than one occasion helped her complete the workshop.

Learners also commented that they had received administrative and technical support from knowledgeable individuals and that support was provided quickly. When asked during the interview, those learners who had experienced technical difficulties all responded that I had responded to their needs in a timely manner within 48 hours. The same was said of the technical and administrative support provided by the CNFS. Sophie, the participant who only managed to access the workshop much later than the other learners, also held that opinion. Roxanne experienced some access difficulties, but her description of the event indicated that for her, technical difficulties were a usual occurrence:

Investigator What kind of difficulty did you have?

Roxanne I couldn't enter, my code wasn't working.

Investigator How did you fix the problem?

Roxanne I called the number I was told to call in case of technical difficulties, they fixed my problem and I was able to connect. I didn't have any problems after that.

Investigator That's good! Was this frustrating?

Roxanne Bof! That's part of technologies. We're used to it by now (learner interview).⁶⁹

Outcomes

The examples reported by the learners in the various data sources suggested that learners achieved outcomes related to CPCP knowledge, skills, attitudes, and practices. In all relevant data sources (temperature check, post-workshop survey, and interview), participants who completed at least one workshop unit reported having constructed knowledge about various

aspects of CPCP. Only learners who had participated in the discussion forum reported examples of increased CPCP skills, changed attitudes toward CPCP values, and altered practices.

Knowledge

After participating in the workshop, learners had a better grasp of the differences between cooperation and collaboration and seemed to understand the definitions of the various approaches to team-based care. For example, Justine commented that definitions were very important for her:

In this course, I saw that we had evolved and that we don't speak of multidisciplinary so much anymore but of interprofessionalism ... Even if I'm new at the healthcare center, they [the healthcare center] are already behind ... This really surprised me (learner interview).⁷⁰

Learners were also able to explain CPCP concepts and their advantages to others and understood where these concepts could be applied in their workplace. Lise felt comfortable enough with CPCP concepts to share them with her colleagues: "I even discussed the concepts with people at work. I had the opportunity to talk with them and say: Hey! I found interesting information, and then we'd talk about interprofessional topics (learner interview)".⁷¹ The legal aspects of interprofessional practices captured Sophie's attention and she found that it was relevant to her workplace. She interpreted her readings in this way: "The article argues that there will surely be incidents because we are at the beginning and court decisions will be rendered, but we have to look beyond that, we have to create an opening, and I find that interesting (learner interview)".⁷²

Vickie reported that she used the evidence provided in the workshop in support of interprofessional collaboration to support her decisions at work:

It has given me tools to support my argument. For example, why do I want this type of person on my team? ... It gives me confidence to go and get that resource because it is valuable. It's demonstrated by this or that study and it's not just my personal opinion (learner interview).⁷³

Melanie learned the importance of planning for change. She felt she already had a good grasp on CPCP concepts but realised that she couldn't change everything at once and had to choose where she wanted to start with her teams. Other participants made similar comments, such as Lise and Nicole who stated that they had learned the necessity of prioritizing their actions to stimulate CPCP in the workplace. Melanie decided she wanted to go back to basics with the teams she worked with and find ways to help them understand each other's roles and responsibilities:

Investigator Is there any information or knowledge that you found on the website that you are now able to apply?

Mélanie Yes, the idea of developing a good plan and to review the scope of practice of each professional. We knew that, but it's more concrete now that it's important to recognise each other's roles and responsibilities and to develop a plan to start working together (learner interview).⁷⁴

Skills

The temperature check, post-workshop survey, and interview data revealed that the participants who had completed most or all of the workshop content and who had participated in the discussion forum had developed CPCP skills. Learners reported they knew when and how to facilitate interprofessional practices. Sophie detailed how she would approach role sharing in her new community healthcare center in a non-threatening way:

I've learned how to tell them: "You know, yes you're a nurse and when you worked down south you didn't have to do this, but here it will be O.K. We have found someone else who is Francophone and who can teach you to do part of this work even if theoretically this is not part of your usual scope of practice." It's easier for me to make those associations now, to be able to present this to people in a non-threatening way. "Yes elsewhere you wouldn't do this but here we'll have to develop a way to work together" (learner interview).⁷⁵

Melanie, Vickie, and Nicole used CPCP concepts to stimulate collaboration during team meetings and to strengthen communication between team members. Nicole described the way her team functioned:

I have new people in my team and the old and new people don't have the same ideas. It's as if we have to rebuild the group dynamics and that's where I used some of these concepts. For example, sharing roles and seeing what every person brings. I did that! It brought me that!⁷⁶

Justine stated that she now had the skills to help her team develop better collaborative practices. She reported being able to diagnose her team's problems and work toward resolving them:

The reason why it was so difficult to function or why there was conflict was because the healthcare providers' roles weren't clearly defined. We worked on that, how to define a bit better who does what. We talked about it through case discussions ... we realised that patients travelled within our team but no one had a global view ... Everyone had a little piece of the puzzle but no one had an idea of what the finished image was supposed to look like ... We worked on that (learner interview).⁷⁷

Lise also reported having acquired skills as a CPCP educator. In her example, Lise described how she modified her usual way of teaching to incorporate CPCP concepts:

Two weeks ago, I happened to be teaching a training session and ... I remember that I spoke to that particular group about the importance of collaboration and discussion, about sharing our action plan with other team members as well as other things. So I talked about it, it influenced me and I think it will influence others this way (learner interview).⁷⁸

Attitudes

During the interviews, some learners shared examples that demonstrated changes in their attitudes that were relevant to becoming CPCP educators. Sophie reported she had found the concept map useful for program planning and had learned that it was important to thoroughly evaluate the work environment before starting a CPCP project. She emphasised, "I will do a lot of concept maps; I'll do concept maps all my life! (learner interview)".⁷⁹ Melanie explained how she was working on integrating a new profession in an established healthcare team. She noticed that discussions always took place between a few members of the healthcare team and that others were left out. She explained how she responded: "Whether it was in reaction to the first unit of the course or if it was my personal philosophy, I found it was important to have everyone around the table to talk together (learner interview)".⁸⁰

Learners affirmed in the temperature check, in the post-workshop survey, and in their posting on the website the importance of communication, role sharing and having a holistic view of the patients' needs. They explained how these elements were fundamental values of CPCP. Justine, who described how she had started case studies with her staff during team meetings,

reported that she had not only changed her own views on CPCP but had also changed the views of her employees. She contended,

The vision has started ... We were able to plan for continued care ... and the team was really pleased and enthusiastic. This was our first accomplishment and I think this tradition will age well within the team. I think this activity answered a need and created a sense of belonging to the team (learner interview).⁸¹

Practices

During the interviews, learners were able to provide examples of new practices where they had shared, applied or integrated the concepts of CPCP. They often expressed feelings of satisfaction at having used some of the concepts they learned to solve problems in their workplace. Sophie explained how she planned to use her concept map to help her organise the physical space in her new center. She stated,

We will organise the physical space for people who will work there to favour networking ... not just say that we have a meeting together every week but actually seeing the impact the organisation of physical space will have on team functioning (learner interview).⁸²

Vickie explained that she now made a conscientious effort to collect information from all healthcare groups within the organisation before developing an education program. She described the process as follows: "My approach to collect information, especially when I need to identify other interventions, other than nursing that is, I go search everywhere in the hospital to see what the perceptions are and to find out who does what (learner interview)".⁸³ Not only did Vickie search for encompassing information to develop relevant training programs for all the healthcare providers she worked with but she also explained during the interview how she planned to integrate CPCP concepts within her education programs.

In the various data sources, learners related the importance of helping healthcare providers develop a collective team identity. They stated that colleagues needed to be comfortable with representing the team rather than their profession during their interactions with patients and families. Sophie provided an example:

Often people will say: “She’s not here, she works on Tuesday, so you can come back and see her”. You know, there’s a lot of overlap, we must learn to say instead: “Look we’re managing the case together and together we can tell the family what’s going on.”(learner interview).⁸⁴

Learners affirmed in the post-workshop survey and in their postings on the discussion forum that it was important to insist that all relevant healthcare providers be represented on a team. They also expressed the importance of giving an equal voice to all team members and encouraging discussion about roles and responsibilities. Melanie provided an example in which she had integrated all three of the above-mentioned CPCP principles:

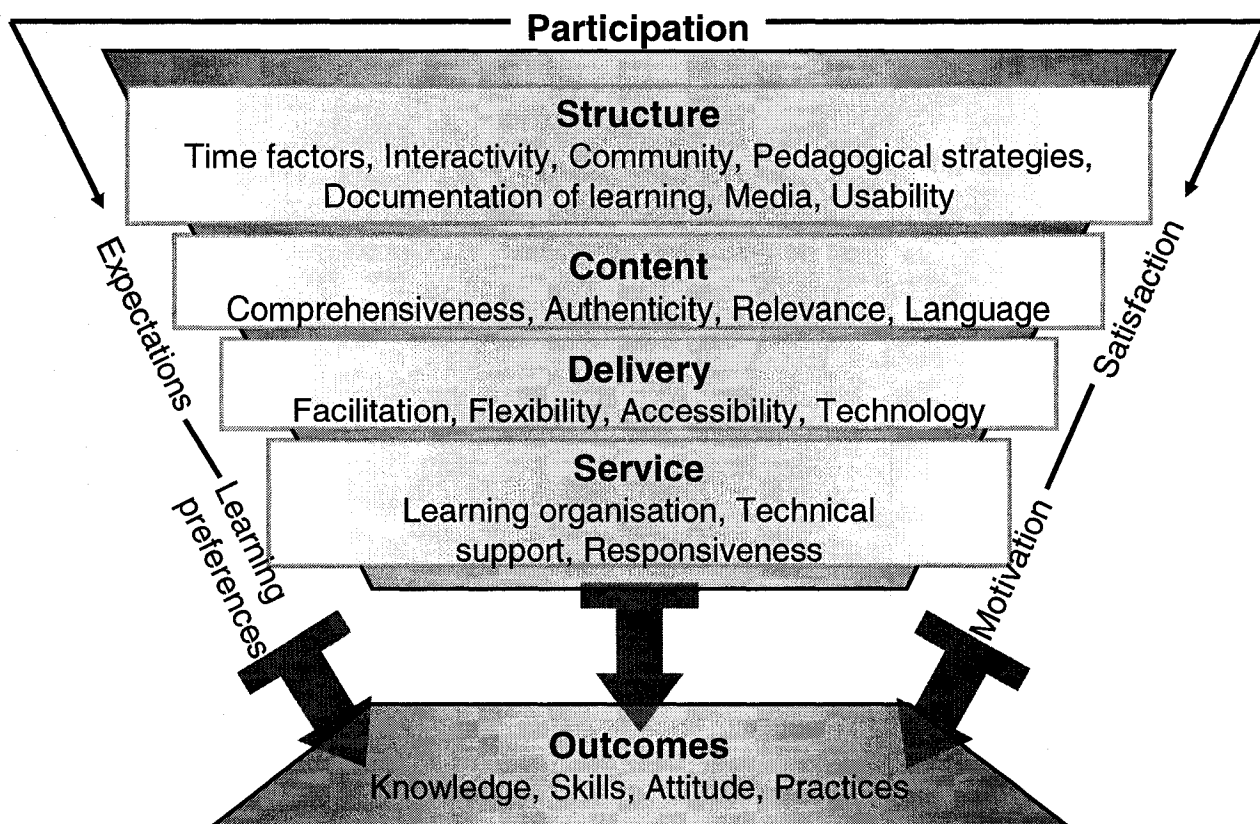
We developed a code pink⁴⁰ for newborns ... Since the paediatricians were not always on site, we trained emergency physicians to cover for them until they arrived. Nurses, obstetrician, respiratory therapist, and midwives were also involved ... and we had to determine very clearly the roles of each person in a code pink. Not only did we train everybody together in an interprofessional way but it was a group of three healthcare professionals who provided the code pink training ... It worked like a charm and everyone was amazed ... They said: “We work together so much better now, we know each other well” ... I see a lot of positive effects of that (learner interview).⁸⁵

⁴⁰ A code pink represents the steps a care team should follow when cardiac arrest occurs in a newborn.

Conclusion on the Categories and Descriptors

I postulated at the outset of the study that the design, development, delivery, and evaluation of the IECPCP eLearning workshop would include the elements of structure, content, delivery, and service to reach positive outcomes from the eLearning workshop. Participation was added as a category because, based on the findings of this study, it appeared that structure, content, delivery, and service are intrinsically linked to participation, and all categories can mutually influence the outcomes of an IECPCP workshop (figure 28).

Figure 28: Relationship between categories and descriptors



Original figure illustrating the relationship between the study's categories and descriptors. Structure, content, delivery, service, and outcomes represent five of the six categories confirmed during data analysis and are organised here in the same chronological order in which they appeared during the design, development, delivery, and evaluation of the IECPCP eLearning workshop. Participation is a sixth category and was found during data analysis. To illustrate its overarching quality, participation surrounds structure, content, delivery, and service and is anchored in the category of outcomes. The descriptors, as described by the study participants, are listed under each category.

CHAPTER 5

Discussion

Introduction

The purpose of this intrinsic case study was to explore the process of designing, developing, delivering, and evaluating an IECPCP eLearning continuing education workshop intended for post-licensure healthcare providers interested in stimulating CPCP in their workplace. Specifically, this study examined how careful planning of the structure, content, delivery, and service of an online workshop was perceived by learners and it examined what self-reported examples of outcomes the learners thought they had achieved.

Based on the theoretical framework of this study, I postulated that the effectiveness of the eLearning workshop would be influenced the tenets of Vygotsky's sociocultural theory as well as by Knowles' andragogical model, the IECPCP model, and the DDLM. The discussion interprets the data findings through the lens of socioconstructivism and interprofessionalism to answer the study's research questions:

Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

Secondary research question: What self-reported outcomes, with regards to CPCP knowledge, skills, attitudes, and practices, will healthcare providers perceive they have achieved or facilitated in their workplace as a result of their participation in an IECPCP eLearning continuing education workshop?

The discussion was organised using the data categories of participation, structure, content, delivery, service, and outcomes.

ELearning Effectiveness in Terms of Participation

Participation is the process by which individuals learn and it represents the interaction that occurs between learners and their social environment (Daniels, 2007; Elkjaer, 2003; Fuller, Hodkinson, Hodkinson, & Unwin, 2005). Successful participation is often based on the completion rate of an educational program (i.e., number of graduates), yet the process of engaging in learning as an individual or as a group is also a measure of successful participation and is an indicator of learning (Collis & Moonen, 2005; Hardy, Robinson, Chaloux, & Paulson, 2007).

In this study, learner activity on the IECPCP eLearning website exposed a continuum of participation. In fact, learners determined their own level of participation in the workshop, not necessarily completing the steps that were suggested for the activities. The decision by some learners to not participate in the discussion forum was important in evaluating participation because with eLearning, it is virtually impossible to know the level of personal reflection and work that learners accomplish when the end-result is not shared. Participation is only visible to educators through tracking functions that follow the learners' online navigation paths. It is through communication activities that learners make their participation overtly visible to the learning community (Conceição, 2002). Therefore, learning can occur in absence of communication even though the learning is not visible to other learners or to course facilitators.

It follows then, based on the results of this study, that it would be a misrepresentation of the notion of participation to consider adult learners to be successful participants only if they complete the learning activities according to the intentions of the course developer. Bläka and Filstad (2007) contended that adult learners need to choose how, when, and by what means they

want to engage in learning opportunities. Participation should thus be a measure of what learners perceive they have accomplished, rather than what educators planned they should accomplish.

Role of Learner Motivation

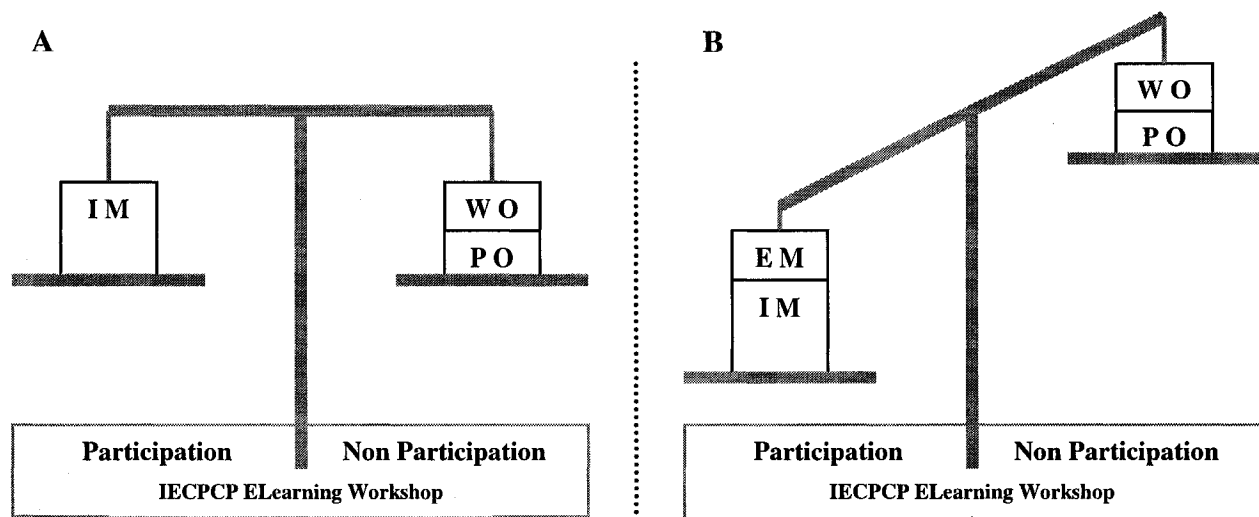
To understand participation, that is, the level of engagement of the learners within the workshop, Long (2004) suggested that we must first understand the motives for learning. Selman et al. (1998) contended, “The more that is known about learning needs and desires, and the factors which influence the decision to participate, the more that will be able to be done to meet these same needs and desires” (p. 119). Knowles’ writings (see for example, 1968, 1984a, & 1984b) favoured intrinsic motivation⁴¹ as a strong determinant of adult participation in educational endeavours. Knowles proposed that adult learners were more likely to participate if they were driven by intrinsic motivators such as self-confidence, self-efficacy, and personal interest than by extrinsic motivators such as financial investment, job security, and career advancement.

Most learners in the IECPCP workshop registered of their own volition, corroborating Knowles’ views that intrinsic motivators are at the forefront of participation. However, the presence or lack of extrinsic motivation influenced whether learners logged on to the website, when they logged on to the website, and, in some cases, dictated which activities they completed. The responses to the low or no participation email indicated that when faced with competing personal or workplace obligations, intrinsic motivation wasn’t sufficient to instigate the participants to act on their desire to learn about CPCP. The case study findings indicated that on the one hand, intrinsic motivation is the spark that ignites interest in learning, and on the other hand, factors such as competing work and personal responsibilities decrease the ability to

⁴¹ “The term *extrinsic motivation* refers to the performance of an activity to attain some separable outcome and, thus is different from *intrinsic motivation*, which refers to doing an activity for the inherent satisfaction of the activity itself.” (Tanaka & Tanaka, 2006, p. 67)

participate. Extrinsic motivation, such as official recognition or employer support seems to weigh in the balance by further increasing the desire to participate. In other words, there appears to be a scale where positive intrinsic motivation may often not be enough to tip the scale toward participation and where extrinsic motivation is one of the factors that plays in the balance (figure 29).

Figure 29: The balance between motivation and participation



Original figure illustrating the relationship between motivation and participation. In the IECPCP workshop, (A) intrinsic motivation (IM) instigated healthcare providers to register in the workshop. However, IM alone was often insufficient to outweigh personal obligations (PO) and workplace obligations (WO), limiting or inhibiting learner participation. In some instances, (B) the addition of external motivation (EM), such as employer support, tipped the scale toward participation.

Alternately, decreasing or reorganising personal and workplace obligations increases the weight of intrinsic motivation and may also tip the scale toward increased participation. This provides a potential explanation why learners who logged on to the website later than the official workshop start date still became active participants. Personal and workplace obligations delayed these participants from starting the workshop, however, a decrease or a reorganisation of these obligations allowed learners to actively engage in the workshop.

Knox (1980) proposed that adult learners' life situations dictate the extent to which they will be proficient⁴² in an educational experience and that effective educators need to take into account these personal influences. In her review of literature on motivational theories, Ahl (2006) suggested that theories developed according to a humanist approach, such as Knox's proficiency theory and Knowles' andragogical model, highlight three factors that influence motivation and participation in adult learning activities: dispositional, situational, and institutional. Dispositional factors include personality traits and self-confidence; situational variables include time constraints and concrete benefits of education; and institutional elements include pedagogy and workplace support. Knowles et al. (2005) suggested that creating positive learning experiences through well-structured andragogy promoted motivation and genuine participation. As Ahl pointed out, such an approach to motivation assumes three things: "*First*, that such an entity as motivation exists; *second*, that it resides with the individual; and *third*, that motivation causes behaviour" (p. 396). Ahl maintained that these three assumptions can be called into question because motivation represents an unproven theoretical construct.

Vygotsky offered an interesting view on motivation. He contended that knowledge and learning leads human development and the formation of personal identity (Vygotsky, 2004b). As knowledge is specific to the learner, so are the identities and the learning goals established by learners. From this perspective, motivation can be viewed as being inherently present in the learner when the learner constructs knowledge. This relational view of motivation removes the notion of motivation or lack thereof as a problem residing with the learner. Rather, if learners are informed about why educators have made certain pedagogical choices to construct a workshop or a course in a particular way, they can then decide if and how they wish to participate. Nevertheless, for Vygotsky, if learners are constructing meaning, then they are motivated.

⁴² "Proficiency is the capability to perform if given the opportunity" (Knox, 1980, p. 388).

Influence of Learner Expectations

Wlodkowski (2004) argued that the desire to participate increases “when adults can see that what they are learning makes sense and is important according to their values and perspectives” (p. 143). In the IECPCP workshop, incongruity between proposed learning activities and learners’ expectations mitigated participation.

Most participants in the IECPCP workshop had taken at least one eLearning workshop prior to participating in this study, and many had done so with the CNFS. Interviewed participants expressed that they thought the IECPCP workshop would be structured in the same way as the previous eLearning workshop(s) they had experienced, regardless of the explanation provided in the promotional material about the workshop’s description and objectives. Learners were not expecting the concept map activity, because this tool had not been used in their previous experiences. Learners were also not necessarily inclined or committed to communicating in the discussion forum, because they found it too time-consuming or didn’t recognise the value of this tool. Yet both the concept map activity and the discussion forum are well documented constructivist and socioconstructivist tools known to stimulate higher order learning as well as self-directed learning (Hung, Tan, & Koh, 2006; Jonassen & Strobel, 2006; Merrill, Barclay, & Schaak, 2008). Moreover, the concept map and discussion forum were designed to enhance the applicability of the workshop to each learner’s personal situation at work. The self-directed learning, life-centered learning, and social learning supported by the concept map and the discussion forum are central concepts of the andragogical model and sociocultural theory and should have, based of these theoretical constructs, stimulated learner participation rather than hindered it.

Clulow and Brace-Govan (2003) reported similar results when they conducted a series of interviews and analysed personal journals of undergraduate students registered in a credited online course in Australia. Even before they started, many students expected an online course to be easier than a f2f course and when they recognised that eLearning was just as difficult, many students fell behind or abandoned the course. Although the context of Clulow and Brace-Govan's study is different than the context of the IECPCP workshop study (i.e., formal vs. continuing education workshop), the relationship between expectations and participation is still clearly demonstrated. Similarly, Platzner, Blake, and Ashford (2000) applied a sociocultural approach to online learning, through the use of in-depth group discussions, for 30 nurses registered in a post-licensure diploma in Professional Studies. Platzner et al. reported that the learning process was not easy: "Most students were expecting a traditional model of education when they began their diploma programme and the more adult-centered approach caused a lot of confusion and conflict" (p. 1004). The authors did not report how the learners were prepared for this approach to eLearning but their findings were comparable to the IECPCP workshop.

Knowles and Associates (1984) explained that even though adult learners are inherently self-directing in every aspect of their lives and should be so in their approach to learning, "they hark back to their conditioning in school, assume a role of dependency, and demand to be taught" (p. 9). Oppermann and Specht (2006) suggested that learners resist new forms of learning, especially in a web-based environment, as this represents an additional level of difficulty. Opperman and Specht stated that new activities within a novel learning environment increase the cognitive load on the learner. According to Seel (2008), "Because working memory can only process limited amounts of new information, an overload can result if the learning task is too complex" (p. 42). Early (2006) added that when eLearning requires a mental effort that

exceeds the advantages of pursuing the learning activity, learners will decrease participation. It is therefore reasonable to postulate that the cognitive load in the IECPCP workshop was high for a continuing education program with no formal educational credits, and this cognitive load deterred many learners from participating.

The findings from the IECPCP workshop showed that not only do learners need to develop the knowledge and the skills required to function in an online environment (Desjardins, 2005; MacDonald & Thompson, 2005; Sargeant et al., 2004), learners also need to make the transition toward using new pedagogical approaches such as concept mapping, sociocultural learning, and self-directed learning. Taming technology and pedagogy in turn stimulates participation.

Implications of Learning Preferences

Learning preferences also affected the rate of participation. Schommer (1998) argued that learners' epistemological beliefs subtly guide their decisions, consciously or unconsciously, about what they want to learn, as well as when and how they want to learn it. In the surveys and interviews completed for this study, many workshop participants expressed a preference for f2f learning and for paper-based documents.

Learner preference for f2f learning in general is well documented and can unfavourably skew their perception in the online environment (Cobb, 2004; Fillion Carrière, 2001). Sargeant et al. (2004) reported that physician learners were divided between those who preferred eLearning and those who preferred f2f learning. Physicians who preferred eLearning participated more actively in the online discussions than physicians who preferred f2f learning. In my study, there was no clear distinction as to whether learners who preferred f2f learning participated less in the

discussion forum, but these learners did voice more complaints about the perceived extra workload imposed by online discussions.

Another preference revealed in this study was the learners' tendency to explore workshop activities without reading the instructions first. This activist⁴³ style of learning (Chevrier, Fortin, Théberge, & Leblanc, 2000; Honey & Mumford, 1992) may have prevented learners from taking note of the instructions on what to do prior to starting the various activities and probably led to some confusion about how to complete an activity, as noted in the interviews. According to Vygotsky's sociocultural theory, instructions in an online environment can serve as scaffolds⁴⁴ to bring the activities to a manageable level for the learners while still pressing them to achieve higher order learning. Explanations in the IECPCP workshop were in fact virtual mediators, cultural tools developed to scaffold the learning process. These explanations were vital to the participants' ability to understand what they needed to do and to help them construct new knowledge. Because eLearning stimulates learners to self-manage their learning process (Conceição, 2002), many adopted a non-linear progression, which further accentuated the difficulty learners encountered with the concept map, an organised step-based activity. The lack of explanatory support experienced when some learners adopted a non-linear approach to working through the workshop activities likely contributed to their sense of information overload. Perhaps providing better preparation for online learning, such as a virtual tutorial that learners complete prior to starting the eLearning workshop, would help learners understand how to use the explanations that represent the "teacher" or the "more abled peer" in the online context.

⁴³ People who prefer the activist style of learning: learn by doing. They need to experience events in their environment to learn rather than reflect on it (Honey & Mumford, 1992).

⁴⁴ Scaffolding is a concept whereby support is given to a learner to extend their problem solving abilities beyond their capacity. As the learner's skills improve, the support is progressively removed (Pascual-Leone & Irwin, 1998).

Effect of Satisfaction

For Illeris (2003), satisfaction is part of the emotional dimension of learning and creates a mental awareness conducive to learning. Rager's (2004) qualitative study on the self-directed learning experiences of 13 American breast cancer patients demonstrated a strong relationship between the patients' emotional state and their ability to engage in learning activities. Based on a series of interviews, Rager reported that the more empowered the patients felt, the more they were able to guide their learning process, which in turn increased their feeling of empowerment and satisfaction with their learning activities. It is unclear in Rager's writings how the patients documented the learning process and what type of learning activities was available to them. This makes it difficult to compare Rager's findings with those from the IECPCP workshop. Nevertheless, in my study, the findings show that the IECPCP eLearning workshop reached the learners positively on an emotional level. In fact, all the participants in the IECPCP workshop reported a sense of overall satisfaction with their learning experience even though eLearning, self-directed learning, and the pedagogical activities did not always correspond to their learning preferences.

Link between Participation and Knowles' Andragogical Model

According to the andragogical model, the goals of an education program dictate how the core adult learning principles—learner's need to know, self-concept of the learner, prior experience of the learner, readiness to learn, orientation to learning, and motivation to learn—are applied. If the learning program aims for individual growth, attention should be paid to the self-directedness of the program as well as the program's ability to promote self-actualisation. If the goal is institutional growth, then the goals of the learning endeavour are shared between the institution and the individual, perhaps with more "situatedness" of the learning strategies within

the workplace context (Hansman, 2001). If the goal is societal growth, then the learning resource needs to fit with both societal needs and individual needs. According to Knowles et al. (2005) “This group of factors connects andragogy with the socio-cultural influences now accepted as a core part of each learning situation” (p. 153). Unfortunately, Knowles’ andragogical model portrays society, workplace environment, and individual characteristics as factors that influence the core adult learning principles but not as a blended structure. For Vygotsky, environment, society, and culture are not separate from the individual learner but are a completely integrated system. In Ratner’s (2004) accounts of sociocultural theory he stated, “Vygotsky strongly believed that human psychology is a cultural phenomenon. It originates in cultural processes, embodies them, and perpetuates them” (p. 403). Accordingly, applied learning principles should not only consider learners’ cultural and social environment, they should be dictated by learners’ cultural history about ways of learning and knowing.

For the most part, the study demonstrated a close link with Knowles’ core adult learning principles. Participants in this study registered in the IECPCP workshop because they perceived it to be relevant to their work situation. Their orientation to learning was therefore problem-centered, and intrinsic motivational factors were the main catalyst for registering in the workshop. As predicted by Knowles and Associates (1984), learners presented conflicting learning concepts such as the expressed need to guide their own learning process as well as the expressed need to be guided. Prior eLearning experiences seemed to influence learners’ perception and expectations about the learning process and affected their level of engagement in the different types of activities (i.e., conceptual map, discussion forum, video). However, the andragogical model does not punctuate the interplay that exists between intrinsic motivation, extrinsic motivation, and personal and workplace obligations as an integral part of the learning

process. Instead, Knowles et al. (2005) added individual and situational differences as another layer in the andragogical model and represented them as a concentric ring around the core adult learning principles. Knowles et al. perceived individual and situational differences as extraneous variables. This study demonstrated that learning preferences, learner motivation, expectations, and level of satisfaction significantly influenced learners' engagement within the IECPCP eLearning workshop. For example, the combination of intrinsic and extrinsic motivation was balanced against personal and workplace obligations. Intrinsic motivation was often not sufficient to spur participation regardless of the organisation of the learning event and congruency between the workshop and Knowles' core adult learning principles. I propose that individual and situational differences are not extraneous variables, but are fully integrated components of the eLearning system with as much weight as any one of Knowles' core adult learning principles.

ELearning Effectiveness in Terms of Structure, Content, Delivery, and Service

MacDonald et al. (2001) emphasised that eLearning must "engage learners in meaningful learning through reflection, application, and interaction" (p. 14). To do so, the findings of this study suggest that careful attention must be placed on the structure of the eLearning workshop, the content that is shared with the learners, the way the workshop is delivered, and the support services offered to the learners. The discussion presented in the previous section, shows that the design, development, delivery, and evaluation of an eLearning workshop influences participation and has far-reaching implications for the development of continuing education eLearning workshops for the healthcare field.

Considerations of Structure

One of the basic principles of eLearning design is to establish the best possible understanding of the learners' characteristics and learning requirements (Dean, 2004). In this intrinsic case study, the theoretical underpinnings, the needs analysis survey, the pre-workshop survey, personal knowledge of the healthcare field, and personal experience in eLearning provided the basis for structuring the IECPCP eLearning workshop. Similarities between the responses to the needs analysis and the pre-workshop survey confirmed that the learners' perceived needs had been respected in the design of the workshop. Subsequent analysis of the temperature check, online communications, the post-workshop survey, and the interviews, highlighted some key areas to maintain in the workshop's structure and some issues that were different than what participants reported in the needs analysis and therefore required reconsideration.

Time factors

The time of year during which the workshop occurred and the length of time learners were willing to commit to complete the workshop activities reflect cultural factors that characterise healthcare providers and the healthcare system in Canada. According to Ratner (2004), "Vygotsky emphasised that personal activity incorporates cultural factors" (p. 409). Vygotsky (2004c) argued that organised culture directed human learning and that the internalisation of social values was critical for humans to function within society. Failure to incorporate cultural specificities in online education leads to a learning program that cannot adequately respond to the learners' needs (Wang & Reeves, 2007). In this study, the production team and I carefully selected the pedagogical strategies so that we covered the CPCP topics requested by the participants within their preferred six week time frame. To do so, we increased

the total number of workshop hours from 12 to 20. The findings showed that this strategy was not sufficient to address the learners' needs. While the design phase focused on fitting the structure of the workshop to the learners' expressed personal needs, the design did not take the culture of the healthcare system into account. The resulting design affected the learners' ability to participate to the level they wanted within the time frame provided. As recommended by Schrum (1998), the time allotted to complete an online education program should be multiplied by two to three times more than what one would allow in a traditional mode of delivery (i.e., f2f).

Pedagogical strategies, media choices, and usability

The case study findings showed that learners will often navigate learning materials in a non-linear fashion and particular attention must be placed on designing eLearning programs that allow learners to complete the activities in the sequence of their choice (Merrill et al., 2008). From a pedagogical standpoint, the encompassing design of the workshop accounted for the learners' reported satisfaction with the proposed activities. The apportionment of concepts, the media choices, and the proposed activities followed current pedagogical standards in eLearning website organisation (Clark & Mayer, 2003; Richard & Bissonnette, 2005). Furthermore, learning opportunities were scaffolded to enable learners to start with known concepts and slowly move toward more abstract topics, working within the individual learners' ZPD. From a sociocultural perspective, the study demonstrated that the website was an agent of mediation, an external support that could influence the participants' learning process (Glick, 2004).

The concept map was the one activity that raised concerns for the workshop participants even though the study findings demonstrated that it promoted higher order learning. The concept map offered the possibility to "personalise learning, share knowledge and re-enforce learning"

(Navarro, Such, Peco, & Martín, 2005, p. 67). Developing a concept map requires strong critical thinking skills, which according to Brookfield (2004a), is an approach to education that must be carefully nurtured within the learning environment. Learners did not question the value of the activity, nor the step-based approach used to guide them through the activity. Rather, they expressed difficulty in attempting this activity before gaining a better understanding of CPCP concepts. During the design phase, the other members of the production team and I thought it best to gradually embed the concept map activity within each of the workshop's units. We split the activity into small, manageable steps to allow its dissemination throughout the six-week time frame. This decision was based on the needs analysis, where participants expressed that they were comfortable with CPCP concepts and expressed that they wanted to learn how to plan for change. This view was reiterated in the pre-workshop survey. Learners commented that once they started interacting with the workshop content, they realised that they had miscalculated their level of CPCP knowledge. This miscalculation relates to Lockyer et al.'s (2005) study in which the researchers found it difficult to anticipate a priori what would be learned in a workshop. In Bruner's (2004) interpretation of Vygotsky's writings, he stated that activities such as the concept map were tools to help shape the learners' mind. Given the proper support, these tools needed to be within reach of the learner. In this workshop, learners' comments indicated that the concept map was introduced too early in the IECPCP workshop. It seemed to be beyond reach for most learners, whereas the CPCP concepts were appropriately scaffolded.

Interactivity and community

In the IECPCP workshop, the ability to have continual interaction with the learning media, other learners, and the facilitator was designed to help learners integrate CPCP concepts and prepare them for eventual application to other settings (McPherson & Nunes, 2004).

Vygotsky described this social mediation of learning as moving from interpersonal processes to intrapersonal processes (Meshcheryakov, 2007). For Vygotsky (Stetsenko, 2004), knowledge and generalisable meanings are mediated by “others” within the learning environment, represented in this study as web-based applications, the learners, and the facilitator. Once meanings are integrated by a learner, they become intrapersonal and can be applied to other circumstances or settings. I hoped that the facilitated asynchronous discussions would be integral to the interpersonal process. Unfortunately, this did not readily occur. Although discussion opportunities were supposed to mediate the learning that took place and help learners develop a sense of community (Chalmers & Keown, 2006; Guldberg, 2008), not all active workshop participants took advantage of this communication strategy.

Learners who chose to engage in the discussion forum were able to compare their individual perspectives on a topic and help each other develop a more complex worldview (Brookfield, 2004b; Conrad & Donaldson, 2004; Eastmond, 1998). The online discussions also served to establish a sense of inclusion, as indicated when learners expressed that they felt respected regardless of their area of practice or their profession (Wlodkowski, 2004). Still, the flexible activity calendar led to uneven participation. Learners did not consistently use the asynchronous communication strategies to help each other through the various learning activities and it was difficult for participants to connect personally with each other. A solution to this communication problem could be to explicitly invite participants to register in the workshop with a learning partner with whom they can work outside the online environment.

The findings indicated that reading and writing messages in the discussion forum was a time-consuming activity. This is a well documented grievance in the literature about online discussions (Clulow & Brace-Govan, 2003). The increased workload associated with discussion

forums may explain why some learners in the IECPCP workshop chose to read posted messages without responding. Bento and Schuster (2003) explained that for a facilitator, discussions are a visible way to witness learning. Studies, such as Beaudoin (2002) and Yuen (2006), have shown that “witness learners” or “lurkers” (learners who only read messages but do not write any), at least in the formal education setting, are indeed learning and perform as well in their assignments (e.g., term paper and science problems) as learners who fully engage in online discussions. Yuen also found that learners who did not participate in the discussion forum or participated as lurkers preferred f2f learning to eLearning.

Given the emphasis placed by Vygotsky’s sociocultural theory on learning within social situations, I asked L. Burge (personal communication, May 14, 2007) for her opinion on whether participation in the discussion forum should be mandatory or at the very least solicited by follow-up telephone conversations or emails. Burge reminded me that in the context of a continuing education workshop, which offers no formal education credits, the adult learners likely retrieved the information they were seeking without participating in the discussion forum. Burge emphasised that planned interactions, although pedagogically sound, most likely did not correspond with these participants’ needs or desires. The findings of this study suggest that the pedagogical rationale for online discussion should be more clearly outlined at the beginning of the IECPCP workshop to help learners better understand the purpose of the discussion forum. Learners could then choose whether they want to take full advantage of the available communication tools as a part of their learning strategy.

Documentation of learning

Regardless of the level of interactivity or the level of participation, an online learning event must include a means for adult learners to self-assess their learning (Dean, 2004).

As suggested by Daley (2003), the variety of media (i.e., video, illustration, text) used in the IECPCP workshop allowed learners to go back and forth between new concepts and work practices. Learners could therefore self-assess their level of understanding of the CPCP concepts through their ability to apply each concept to a work-related example. Learners were also invited to compare what they had learned at the end of each unit with the associated learning objectives and to complete a pre- and post- workshop reflection. In this study, only one learner chose to complete the reflection evaluation tool. The concept map was the only activity in the workshop that provided a structured method to document the learning process. Through the concept map activity, learners demonstrated their ability to perceive elements that influenced CPCP in the workplace through the brainstorming activity. Learners showcased their grasp of CPCP concepts by finding themes within their semantic field and drawing their concept map. Finally, learners demonstrated their ability to generalise learning to their work situation using the action plan activity. For Vygotsky, generalisation leads to decontextualisation of concepts from the specific settings in which meaning was constructed (van der Veer, 2007a). In his interpretation of Vygotsky's philosophical dimensions, Bakhurst (2007) affirmed, "Generality is linked to transferability: the more general a concept or technique, the greater its sphere of application" (p. 69). The concept map was therefore a pedagogically sound choice to document the learners' higher order learning as it provided the means to decontextualise the CPCP concepts presented in the workshop units and generalise them to their work situation.

For the IECPCP workshop, the data showed that learners preferred to self-assess learning by counting the number of activities completed and by comparing their thoughts or answers with other comments posted in the discussion forum, particularly with the comments I posted as the facilitator. This form of self-assessment corresponds to Vygotsky's notion of "self-authoring in

relation to others”, where learning is the active internalisation of collective meanings. In Holland and Lachicotte’s (2007) view of Vygotskian thought, they alleged, “We actively internalise a sense of our own behaviour as compared to the behaviour of others acting in related roles and positions” (p. 107). Although this comparison approach to self-evaluation respects the adult learners’ need for self-directedness, Knowles and Associates (1984) noted that some learners have difficulty distancing themselves from traditional modes of evaluation.

Considerations of Content

Conti and Kolody (2004) stated that “every teaching-learning transaction deals with some type of content” (p. 188). Therefore, content is central to the design process but requires creativity in its implementation to ensure that the content captures learners’ interest, enables them to grasp the concepts, and also respects the pedagogical underpinnings of the chosen learning approach. These decisions must rely on the learners’ stated needs, which include their learning styles and the main body of information that is relevant to the chosen topic (DuCharme-Hansen & Dupin-Bryant, 2004).

Comprehensiveness

As recommended by Kovacich (1996, 1997), I developed the content for the workshop to facilitate the construction of knowledge about CPCP and support change. I determined the comprehensiveness of content and the distribution of topics within the workshop based on the needs analysis and personal expertise (Dean, 2004). Careful attention was paid to how learners would interact with the content because the way individuals learn is as important as what they learn (Kim, Lee, Merrill, Spector, & van Merriënboer, 2008). In accordance to Vygotsky’s theory, the workshop content was a tool to shape the minds of the learners and in turn the tool was reshaped by learners as they worked with the content (Edwards, 2007). This reshaping of

content led to learners developing new meanings that were socially relevant to them. The findings from this study showed that the approach used for content development was well received by learners as it stimulated them to construct their own meanings about working in healthcare teams.

Authenticity and relevance

The interviews with the production team revealed that our collective construction of meaning enhanced our ability to develop relevant exercises and examples that learners could easily understand and apply to their own work situation regardless of their professional background. Wlodkowski (2004) alleged that “people find learning relevant when it has personal and cultural meaning, allows for their perspective, and reflects their reality” (p. 147). Similarly, McPherson and Nunes (2004) argued that authentic learning activities do not define the structure and paths of learning, but are rather part of the process by which the learners construct a perspective or understanding that is specific to their lived realities. Whether learners were searching for examples that resembled their own situations, or seeking evidence to support their arguments for changes in team practices, the findings of this study showed that learners were able to find content that they viewed as authentic and that was relevant to them.

Language

Wang and Reeves (2007) noted that language and culture were interrelated and that special care had to be taken to simplify language without using regional slang. Learners in the IECPCP workshop had different levels of education (e.g., college and university—undergraduate or graduate), professional cultures (e.g., different professions and disciplines), areas of practice (e.g., direct patient care, training, and management), and language specificities (e.g., Franco-Ontarians and Acadians). The study findings showed that learners had difficulty associating the

titles of certain concept map activities to the task that was expected of them. Vygotsky (2004d) refers to Tolstoy to explain the importance of word meaning, saying, "It is generally not the words itself that the [learner] fails to understand but the concept that the word expresses" (p. 39). To understand what was asked of them, learners in the workshop had to be able to match the words use to describe each step describing the construction of a concept map to the appropriate concept. Many learners had not culturally integrated the words used for the activity titles, so the meaning was not readily understood. Thus, these learners' first impression was that the activity would be difficult and they were discouraged from reading the simpler explanations intended to make the activity accessible.

Considerations of Delivery

The production team spent ten months designing and developing the IECPCP workshop. To aim for quality eLearning, we had to try to understand what learners wanted to learn, how they wanted to learn it, and plan for all eventual needs. The delivery of the workshop and finally witnessing the learners' interaction with the learning workshop was a highly anticipated moment as it represented the culmination of our efforts.

Technology

From their first contact with the eLearning workshop, learners needed to familiarise themselves with the learning interface that existed between them, other learners, and the facilitator. Technology thus became an agent of self-directed learning for the learners (Knowles et al. 2005). Salmon (2000, 2001) stated that eLearning technologies⁴⁵ have the potential to help learners find and interact with other learners with similar interests, stimulate intellectual extension through dialogue and reflection, allow for sharing of contextual and tacit knowledge, and promote knowledge construction. For this reason, White and Bridwell (2004) specified that

⁴⁵ Technologies of eLearning refer to the software, media player, Internet browser, etc. (Kerr, 2007)

“the selection and application of technologies for a specific learning opportunity needs to be appropriate for the intended learning outcomes, subject matter content, relevant characteristics and circumstances of the learner, and cost” (p. 277). I took these recommendations into account when designing the workshop. More precisely, I focused not on the technology used to stimulate learning, but on the learning processes stimulated with the technology (Samaras, Giouvanakis, Bousiou, & Tarabanis, 2006). As a result, the learners in this study reported that they appreciated the use of eLearning technologies for continuing education and affirmed that eLearning was generally compatible with their personal realities, needs, and level of experience.

Flexibility and accessibility

Gilbert (1998) noted that “without the demands of a class schedule, individuals can linger on unfamiliar material and not waste time on things they already know” (p. 19). In the IECPCP workshop, learners could work at their own pace and access the learning material whenever and wherever they wanted, as long as they had access to a computer with an Internet connection. The IECPCP workshop was therefore well received because it afforded the flexibility and accessibility requested by the learners in the needs analysis. Still, learners stated that “anytime, anyplace” accessibility meant that eLearning tended to encroach on their personal time. Some learners also remarked that eLearning required more effort than f2f learning because flexibility meant that they were responsible for guiding their own learning process. This is another example from my study where tension existed between the conception of adult learners as intrinsically self-directed in their approach to learning (Knowles et al. 2005) and learners resisting self-directedness. From a Vygotskian perspective (Cole & Gajdamaschko, 2007), learners’ resistance can be caused by an ongoing acculturation process of the unique learning circumstances in an online environment. With experience, learners gain the necessary skills, such as self-

directedness, to take full advantage of eLearning. This calls into question Knowles' view of self-directedness as an intrinsic characteristic of adult learners that simply needs to be nurtured.

Vygotsky sees self-direction as a culturally and historically mediated phenomenon, in other words a learned phenomenon. This explanation is more in line with the findings in this study.

Facilitation

The facilitator's primary role is to build expertise by encouraging reflective learning, and connect the learning to work-related activities (Gilbert, 1998; Tsang, 2005). As Gustafson and Gibbs (2000) expressed, "Learning is more effective if students are encouraged to interact with learning experiences than if they are made the passive recipients of delivered information" (p. 195). For Vygotsky, the mediator's role and the more able peer's role is to operate within the learners ZPD to help them develop new understandings (Glick, 2004). From this perspective, the facilitation of interactions between learners and with the facilitator is crucial to learning.

Following suggestions made in the literature, the IECPCP workshop was facilitated through constructive feedback on the learners' individual postings on the discussion forum (Del Río & Álvarez, 2007; Pascual-Leone & Irwin, 1998; Tan, Hung, & Scardamalia, 2006). This attracted the learners attention to interesting and relevant comments that extended the concepts covered in the workshop. As the facilitator, I also asked questions based on postings and invited learners to respond. This was an attempt to stimulate communication between learners. Despite the application of recommended facilitation practices, learners tended to prefer interacting with only me (and not the other learners) or not interacting at all. Furthermore, many learners preferred interacting with the learning workshop rather than interacting with other learners. In these instances the learning workshop itself became the facilitator. This supports White's and

Bridwell's (2004) assumption "that the educational resources, rather than an instructor, may be the primary interaction for the learner" (p. 279).

One facilitation strategy for inciting learners to interact that was discussed in the literature, is to create small discussion groups of six to eight learners and invite them to work together to solve problems or reflect on collective experiences (Conrad & Donaldson, 2004). This strategy is difficult to implement in a flexible workshop where learners have no financial commitments and are not obtaining formal education credits. The findings in this study showed that not all registered learners logged on to the website, and those who chose to log on often did so many days, sometimes weeks, after the workshop's official start date. Finally, many learners who logged on did not participate in the discussion forum. The workgroup strategy therefore does not seem feasible without a more rigid structuring of the workshop. This approach was suggested by one learner who was interviewed, but rejected by the other interviewed learners. Perhaps Burge's (2007) suggestion would be more relevant in the context of the IECPCP workshop. Burge maintained that the facilitator's responsibility is to create a non-invasive, supportive environment and delegate to the learner the choice of adopting or not a particular interactive learning strategy.

Considerations of Service

The notion of service is a recognition that the learning transaction extends beyond the relationship between learners and the eLearning workshop. Service extends to addressing the practical aspects of participation, including providing technical support or new passwords for accessing the website. Participation is often dependent on the availability of service.

Learning organisation

Health Canada (2006) recognised the CNFS as the leader of French-language online professional development programs for healthcare providers in Canada. These study findings also indicated that the CNFS affiliation impelled learners to register in the workshop. These findings indicated that the reputation of a learning organisation seems to be an external motivator to participation or, at the very least, for stimulating potential learners to act on their interest and register in a workshop. Participants' previous experience with CNFS workshops led them to have certain expectations about how the IECPCP eLearning workshop would be structured. As previously discussed, learning expectations must be considered during the design and development of the eLearning workshop or they may deter participation.

Technical support

The findings in this study revealed that three learners had problems accessing the workshop. Baker, Schihl, and Aggarwal (2003) affirmed that "while account management issues are fairly mundane, the reality is that if students cannot log on to the system to participate in distance education, the effect is the same as locking them out of a traditional classroom" (p. 229). Interestingly, only one learner who had technical problems called for support. The reason two learners chose to not ask for assistance is not known. It could be related to the "intrinsic motivation" versus the "other obligations" scale discussed in the participation section. According to this scale, if "other obligations" outweigh the learner's "intrinsic motivation", then participation decreases. Because learners in the IECPCP workshop registered mostly based on intrinsic motivational factors such as personal interest, many learners were diverted by other priorities, such as increased family activities, once the workshop began. The two learners who did not ask for support may have viewed the access problem as an obstacle they preferred not to

surmount and decided to concentrate on their other obligations. The concept of self-determination advanced by the humanist movement offers some insight into the learners' choice to not ask for support. Merriam et al. (2007) explained that a humanistic learning orientation "stresses the self-directedness of adults and the value of experience in the learning process" (p. 282). Humanist assumptions about learning imply that situational factors play an important part in self-directed learning. Therefore, the personal situation of the learners likely took precedence over resolving access issues to a gratis, not-for-formal-credit workshop that was offered annually.

It is well documented that the learning organisation must provide timely service to maintain participation of learners who experience difficulties and wish to receive technical support (MacDonald et al., 2001). In their study, Clulow and Brace-Govan (2003) found that learners often expected 24 hour, seven days a week support from technical services or from the facilitator. For the IECPCP workshop, The Center for E-Learning at the University of Ottawa was responsible for resolving technical issues during their regular office hours. Learners could also contact me or the CNFS secretary for support. However, these services did not offer around the clock support.

Responsiveness

Speed of response to the learners' requests or postings in the discussion forum is another aspect of service that is discussed in the literature (Salmon, 2000). Because online learning can create a sense of immediacy for learners, White and Bridwell (2004) recommended that "it is important to establish with the student how quickly they can expect a response-within 24 hours if possible" (p. 279). Near instant feedback is not easy to manage.

For this study, I chose to post summaries on the discussion forums at regular intervals rather than responding immediately to each comment posted by learners. This delay in responding to the learners' comments stimulated more learner-to-learner interaction. The reason that this strategy stimulated discussions can be explained, at least in part, by Parchoma's study (2007). Parchoma discovered that learners interacted with each other more often when the facilitator removed herself from the discussion. Learner-to-learner interaction decreased when the facilitator responded more often to the posted messages. Parchoma concluded that facilitators should respond less often to posted messages but when they do, they should share significant thoughts and information with the group. Based on Vygotsky's sociocultural theory, learners' inclination to gravitate toward the facilitator first is culturally and historically engrained. The facilitator is more likely viewed as an all-knowing "teacher" in the topic of study and learners will rely on the teacher to help mediate their learning process (e.g., provide answers). By removing the facilitator, learners will turn toward more abled peers to use them as scaffolds who help them construct new meanings through higher order learning (e.g., problem solving). In this study, by removing myself from regular discussions, participants were more inclined to engage in learner-to-learner discussions and move toward higher order learning. I was able to guide the learning process without hindering interaction between learners by regularly posting significant thoughts and information to sum up ongoing discussions.

Link between Findings about Structure, Content, Delivery, and Service and the DDLM

The study confirmed that the DDLM constructs were relevant and encompassing of many aspects of the design, development, delivery, and evaluation of an IECPCP eLearning workshop. There were similarities between the descriptors found in the data and the elements associated with each of the DDLM constructs although not necessarily in the same combination (see

MacDonald et al., 2001 and figures 5 & 26). For example, in this study, when the descriptor pertained to decisions made during the design or development of the IECPCP workshop, it was relegated to the structure or content categories. Alternately, if the descriptor was connected to elements that could only be witnessed once the workshop was offered, it was assigned to the delivery, service or outcome categories. Finally, when a descriptor related to learner characteristics, whether cultural, social or emotional, it was assigned to the participation category.

In terms of structure, pedagogical strategies were a central topic that paralleled the DDLM in the study. The difference between the DDLM and this study was the importance that pedagogical strategies played on cognitive load (Samaras et al., 2006; Seel, 2008). Another differentiating factor between the categories and descriptors in this study and the DDLM constructs was the issue of learner evaluation. Whereas the IECPCP workshop focused on the documentation of learning, a view of evaluation that corresponds with constructivist and socioconstructivist paradigms (Jonassen & Strobel, 2006), the DDLM only spoke of “providing appropriate assessment and feedback”(p. 24), without giving end-users of the model direction consistent with its constructivist alignment. Time factors were another important element uncovered during this study that was only indirectly considered by the DDLM under the broad category of learner convenience. Given its significant influence on participation, I recommend that time factors be specifically outlined in the DDLM. Finally, in this study, interactivity, usability, and media were associated with the structure of the workshop because these issues were planned for during the design and development phase while the DDLM associated interactivity, usability, and “tools” with delivery. Nevertheless, this study confirmed the

DDLMM's proposal that interactivity, usability, and media/tools are an integral part of designing, developing, and delivering an eLearning workshop.

I found that comprehensiveness and authenticity had a fundamental relationship with content in both the study and the DDLMM. Interestingly, relevance and applicability of content to different settings was presented in the DDLMM as a form of industry driven, procedural authenticity. I argue that relevance is an andragogical principle that corresponds to individual learners as much as it does to their related industry and should be exposed as such in the DDLMM. A more important finding in relation to content was the centrality of language as a facilitator of the learning process. According to Vygotsky (2004c), the interrelatedness of thought and words is crucial to human psychological development and must be recognised. Because language is the primary cultural tool that mediates learning, language should be central to any constructivist/socioconstructivist eLearning model. Interestingly, language was not specifically mentioned in the DDLMM.

In the DDLMM, facilitation is combined with interactivity under the delivery construct. Based on the findings of this study, it is my opinion that facilitation should be a main component of delivery because it represents a primary learning process that only surfaces when delivery of the workshop has commenced (Kane, 2004). Another element of delivery that differed between the IECPCP workshop and the DDLMM related to the learners' perception of eLearning as an approach for continuing education. In this study, flexibility, accessibility, and technology were perceived as intertwined elements of delivery, whereas the DDLMM viewed accessibility as related to service, and flexibility as an element of structure linked to learner convenience. The DDLMM did not detail the overall influence of eLearning technologies on learning within its delivery construct. In terms of service, the descriptors used in the study and the DDLMM were

comparable, with the exception of the learning organisation. This study demonstrated that the good reputation of a learning organisation acted as an external motivator that facilitated learner participation. This potential connection should therefore be acknowledged by the DDLM.

Issues of participation permeated the data collected during the course of this study and thus the concept of participation warranted its own category even though it was not a construct of the DDLM. Nevertheless, the DDLM did include a few characteristics of participation, such as learner needs and learner motivation, stating that “DDLM-based programs take into account what attracts and retains learners’ attention and are structured to present relevant content that arouses learners perceptually” (p. 24). However, the DDLM didn’t discuss the influence of intrinsic and extrinsic motivation or personal and workplace obligations. In the DDLM, motivation did not extend beyond the virtual walls of the learning resource to include the learners’ cognitive, social, cultural or emotional needs (Illeris, 2003; Wang & Kang, 2006). However, expectations and learning preferences are more than a reflection of learners’ needs. They also include the frame of mind (e.g., busy, management, practice), previous experiences (e.g., f2f, online, similar topics), and sociocultural baggage (e.g., ethnic, familial, professional) that learners are bringing to the workshop. Recognising the importance of these issues within the DDLM would support the idea of the need to prepare learners for the learning process. I propose that participation has overarching implications for the DDLM as participation is directly related to structure, content, delivery, and service, in addition to having its own cognitive, social, cultural, and emotional elements. Learning outcomes were the pinnacle of the DDLM, and this study showed that participation directly impacted the outcomes of the eLearning workshop. Finally, the DDLM proposed that an eLearning resource requires continual adaptation and

improvement. I suggest that continual adaptation should also rely on issues of participation and lead to multiple iterations of the eLearning resource.

In summary, the DDLM provides much needed guidance for the design, development, delivery, and evaluation of an eLearning program, but lacks recommendations for dealing with issues external to the learning workshops such as participation, social, cultural, and emotional factors. Theoretical models such as *The MM model: Cybergogy for engaged learning* (Wang & Kang, 2006), focus more adequately on the cognitive, social, and emotive factors of an eLearning program but lack the practical guidance offered by the DDLM on designing, developing, and delivering an eLearning workshop. Given more research data to verify the findings of this study, I believe that the DDLM can be adapted to bridge theoretical and practical elements into one encompassing model.

ELearning Effectiveness in Terms of Outcomes

Measuring the outcomes of an eLearning workshop is at the pinnacle of the DDLM and requires that relevant outcomes be identified. This study used the IECPCP framework (D'Amour & Oandasan, 2004, 2005) as a guide to delineate a list of outcomes that relied on the learners' self-reported examples of newly developed CPCP knowledge, skills, attitudes, and practices. Because the workshop represented a cultural artefact with the purpose of mediating the participants' thought processes, the self-reported examples provided a glimpse into the meanings that were constructed by the learners (van der Veer, 2007a).

Interpretation of Outcomes

Based on a systematic review of IECPCP literature, Barr et al. (2006) found that there were three overlapping foci for educational programs: "Preparing individuals, cultivating collaboration and improving services" (p. 76). They explained that educational programs aimed

at pre-licensure healthcare providers tended to focus on individual preparation for interprofessional practices. Conversely, educational programs intended for post-licensure healthcare providers usually focused on cultivating collaboration and improving services through the adoption of interprofessional practices. The workshop developed for this study was based on the needs analysis in which participants expressed that they wanted to learn how to stimulate CPCP change. Consequently, the eLearning workshop was specifically designed to help educators (i.e., team leaders, managers, professors or clinical supervisors) cultivate collaboration in their workplaces, whether in the clinical or the educational settings. According to Shanley (2004), educators have the potential resolve and power to minimise the factors that could impede change in the workplace. Thus, the IECPCP eLearning workshop activities, and particularly the concept map were chosen to help learners plan for change.

The data collected with the post-workshop survey and the post-workshop interviews showed that learners perceived that they had indeed developed new CPCP knowledge, skills, attitudes, and practices as a result of participating in the eLearning workshop. Therefore, from the learners' perspective, the eLearning workshop did achieve its designed purpose, which was to prepare educators to be able to stimulate CPCP in their workplace. The following paragraphs will interpret each outcome category—knowledge, skills, attitudes, and practices—using Vygotsky's sociocultural theory and the JET framework devised by Freeth et al. (2002) as a guide. As a reminder, the JET outcomes include:

- Level 1 - Learners' reactions
- Level 2a - Modification of learners' attitudes/perceptions
- Level 2b - Learners' development of knowledge/skills
- Level 3 – Learners' behavioural change

- Level 4a - Change in organisational practice
- Level 4b - Benefits to patients

Constructed knowledge

The study findings indicated that learners who had completed at least one unit were able to provide examples of having constructed new knowledge. How to develop a plan for change, the different definitions associated with CPCP, the distinction between modes of practice, and the importance of understanding roles and responsibilities were the highlights of the learning program. These self-reported examples correspond to level 2b of the JET outcomes, development of knowledge or skills. From a cognitive perspective, knowledge forms the basis for developing reasoning skills but it does not necessarily bring about organisational change (Higgs & Titchen, 2000). Nonetheless, newly constructed knowledge has the potential to augment the learners' receptivity to change and when that knowledge is shared, as Lise did with her colleagues, it can influence other team members' receptivity to change as well. CPCP concepts exposed during the workshop became "societal knowledge" for the learners and this newly constructed knowledge had the potential to permeate specific institutional practices (Daniels et al., 2007). The construction of new meanings by learners about effective teamwork meant that the workshop represented a cultural historical tool that mediated their relation with the healthcare world.

Interestingly, learners often recalled events in their daily lives to use as examples of what they had learned from the workshop. The learners' thought structure or how they were able to identify what they had learned was derived from events in the workplace. The relationship between thought structure and social environment is a socioconstructivist concept (van der Veer, 2007b). As described by Holland and Lachicotte (2007), knowledge is "relevant to a culturally imagined, personally valued social position" (p. 113). Knowledge can therefore not be

dissociated from the social and cultural environment in which it is applied, and it becomes part of the learner's meaning-making history.

Learners also relied on examples from the workplace to discuss new CPCP concepts in the discussion forum. Learners were raising their level of consciousness about CPCP and the value of effective teamwork by comparing their understanding of what these concepts meant with how they viewed their work practices. This constant comparison led to evolving interpretations of the way teams functioned at work. According to Bakhurst (2007), "Remembering the past involves reconstruction and narrative; we "think through" past events to make sense of them" (p. 53). Thus, making sense of events in their workplace was a psychological process that enabled learners involved in the workshop to master the concepts of CPCP and develop new mental connections. According to Daniels (2007), Vygotsky did not propose that mental functions changed with learning, rather, he proposed that the relationship between mental functions changed based on the cultural and historical mediation that occurred. Although learners in the workshop initially confronted new knowledge or cultural constructs of CPCP as something external, appropriation of that knowledge through the provision of examples from work meant that learners had expanded their psychological development by making CPCP knowledge their own. This is a concept viewed by Vygotsky (2004c) as *interiorisation*. Meshcheryakov (2007) explained that for Vygotsky, "*Interiorisation* (from the latin "interior") literally means the transition from without to within ... Sometimes it is interpreted more broadly as any mastery of information, knowledge, roles, and attitudes" (p. 165).

Expanded skills

The study showed that only learners who completed at least a few workshop units and participated in the discussion forum reported that they had developed CPCP skills. Learners

described the ability to analyse teamwork problems, stimulate collaboration, and discuss roles and responsibilities. These self-reported examples of skills corresponded to level 2b of the JET outcomes, development of knowledge/skills. Learners were able to decontextualise the mediational means incorporated throughout the workshop to explain how to stimulate CPCP, and used what they learned in very personal situations that were external to the workshop.

Meshcheryakov (2007) contended that for Vygotsky, “Decontextualisation is a historic and/or ontogenic process of generalising meanings and skills (semiotic actions) and their transformation into more abstract actions that do not depend on concrete conditions” (p. 166). For learners who shared examples of having developed new skills, decontextualisation meant that the cultural artefacts of the eLearning environment had become more independent of the unique context in which they had originally constructed their CPCP concepts (Hedegaard, 2007).

The reason that only learners who participated in the discussion forum reported having developed new CPCP skills may be linked to the fact that they were exposed to more examples of social situations where CPCP concepts could be applied (Daniels, 2007). These learners viewed examples provided in the workshop units and read examples provided by learners and the facilitator in the discussion forum. The eLearning exercises proposed in the workshop, outside of the discussion forum, provided one level of scaffolding within the learners’ ZPD, and communication within the discussion forum provided a second level of scaffolding. The two levels of scaffolds enabled learners to appropriate new psychological tools not available to learners who did not participate in the discussion forum (Kozulin & Gindis, 2007). According to Del Río & Álvarez (2007), mediational means must progress within the learners’ ZPD and follow their development to continually challenge the creation and enhancement of new meaning. This could be related to Vygotsky’s concept of double stimulation. As explained by

Engeström (2007), “In Vygotsky’s theory, double stimulation engenders processes that lead to novel solutions, actions, concepts and skills” (p. 374). The content portion of the workshop acted as the first stimulus and the discussion forum acted as the second stimulus, enabling learners to build on their newly constructed CPCP knowledge and develop new CPCP skills.

Developed attitudes

In this study, learners who completed at least one unit and participated in the discussion forum attributed increased importance to the inclusion of patients and other team members in the decision-making process. They also valued the importance of planning in instigating CPCP changes. These attitudinal changes corresponded to level 2a of the JET outcomes, modification of attitudes/perceptions. A qualitative study of CPCP consisting of 70 interviews and conducted at the Sedgefield Integrated Team in the UK found that increased CPCP attitudes and values supported the application of interprofessional collaboration (Hudson, 2007). Although the administrative structure and preparation of the team toward CPCP was credited for the results, the elements of structure and training were not adequately described, making it difficult to interpret the findings. Notwithstanding these reporting issues, the authors concluded that a change in attitudes was part of the solution for the implementation of CPCP.

Indeed, from Daniels’ (2007) perspective, Vygotsky suggested “that a complete analysis of processes of development and learning within pedagogic practice must consider cognitive and affective matters” (p. 308). For Vygotsky, the construction of knowledge and skills were not enough to guide psychological development. An increased level of interiorisation also relied on the affective domain to showcase more complete learning. In Vygotsky’s words (1987),

[Thought] is not born of other thought. Thought has its origins in the motivating sphere of consciousness, a sphere that includes our inclinations and needs, our

interests and impulses, and our affect and emotions. The affective and volitional tendency stands behind thought. Only here do we find the answer to the final “why” in the analysis of thinking (p. 282).

An interesting finding in this study was that like skills development, examples of attitude changes toward CPCP were only reported by learners who completed some learning activities and participated in the discussion forum. The arguments for the importance of double stimulation (Engeström, 2007) apply to attitude changes toward CPCP in the same way it did to the development of CPCP skills. In addition, Vygotsky believed that to better understand the mind, we must explore the social processes to which people are exposed (Bakhurst, 2007; Edwards, 2007). The learners who participated in the discussion forum were exposed to more and different social processes than learners who did not participate in the discussion forum. In light of Vygotsky’s propositions, it appears that learners benefited from their discussions through the modification of psychological processes, thus resulting in new attitudes in support of CPCP.

Implemented practices

The findings demonstrated that learners who participated in the workshop, engaged in the discussion forum, and shared a plan for change based on some or all of the concept map activity reported that they had purposefully applied some aspects of their learning to their workplace. Most of the examples provided by the learners were associated with level 3 of the JET outcomes, behavioural changes, whereas two examples were linked to level 4a of the JET outcomes, change in organisation practice. The development of an interprofessional care map for a code pink, and the conceptualisation of a healthcare center according to CPCP concepts are two self-reported examples that imply repercussions on the organisation and delivery of care. These examples were provided by learners who reported being comfortable with the concept map activity.

The implementation of practices represents a higher form of behaviour and for Vygotsky, such behaviour requires two separate streams of development that are completely interdependent. As stated by Meshcheryakov (2007), "These are, first, mastering the external means of cultural development and thought - language, writing, calculation, drawing; and, second, unique forms of development in higher mental functions that are not demarcated or defined precisely in any way" (p. 161). Hence, Vygotsky insisted on the design of social sites for learning rather than a sustained focus on content and curriculum for the development of higher mental functions and associated behaviours (Daniels, 2007). The concept map activity invited learners to share ideas and concepts that were not predetermined but emergent from the activity process itself. Learners introduced ideas such as identifying challenges and supporting factors for CPCP at work, grouping thoughts together by theme, and creating links between themes. This generation of ideas may have stimulated higher mental function and mediated their learning process. This occurred only with learners for whom the concept map was within their ZPD and for whom this type of learning could serve a developmental function (Daniels, 2007). Still, it seems that for Vygotsky, higher mental functions and human development are rooted in the mastery of social practices (Bakhurst, 2007). Learners had to take part in some form of social process with other learners and the facilitator to achieve the development of CPCP practices.

Because the purpose of the workshop was to stimulate CPCP practices in the workplace, the workshop was designed to strive for more than the acquisition of pre-determined patterns of CPCP behaviour, the workshop was designed to stimulate higher order learning and the construction of learner-specific knowledge. As proposed by Edwards (2007), and as demonstrated by the findings from this study, the stimulation of CPCP practices in the workplace requires the interiorisation of CPCP culture so that learners may develop the complex forms of

behaviour necessary to adapt to various situations. According to Hedegaard (2007), the development of practices depends on how situational conditions within the workshop encourage learners to discover motives for using their knowledge, skills, and attitudes in new situations. So learners who only interacted with the independent online activities and did not participate in the concept map activities were likely not exposed to enough situational conditions (such as the example of plans for change provided by other learners and by the facilitator) to help them develop their own motives and means for using new CPCP understandings in their personal work situations. Engaging in discussions about factors in the workplace that influenced CPCP and starting to think in terms of change through the concept map activity was shown to stimulate the necessary higher order psychological processes to develop new work practices.

Link between Outcomes and the IECPCP Framework

D'Amour's and Oandasan's (2005) IECPCP framework separated the interprofessional educational outcomes from the practice outcomes. Even though the authors insisted on the link between both by stating that "stakeholders must recognise the interdependent nature of interprofessional education and collaborative practice" (p. 11), outcomes were still presented as distinctive groupings with their own micro, meso, and macro level influences. Because this study focused on an IECPCP eLearning workshop, the educational outcomes proposed by D'Amour and Oandasan (knowledge, skills, attitudes, and behaviours/practices) seemed appropriate a priori to serve as a basis of interpretation for the outcomes of this study. The analysis of the self-reported examples of outcomes revealed that the examples also touched on some aspects of practice outcomes presented in the IECPCP framework (patient, provider, organisation, and system). The JET framework bridged education and practice and provided a complementary approach to the IECPCP framework to help interpret the learners' examples. The relationship of

the study's outcomes to both education and practice occurred potentially because the IECPCP eLearning workshop was a continuing education workshop. Many learners were already operating within the realm of healthcare practice and, in retrospect, it seems reasonable that some self-reported outcomes reached the level of organisational change. The IECPCP framework thus fails to include educational outcomes that incorporate factors applicable to continuing education. Merging the JET framework with the IECPCP outcomes may serve as a starting point for increasing the direct relevance of the IECPCP model for continuing education.

The IECPCP framework also failed to present many learner characteristics found in this study that influenced participation in the eLearning continuing education workshop. In fact, d'Amour and Oandasan affirmed that "learners can thus be either within the pre-licensure or post-licensure levels of training but the micro and meso-level factors that need to be addressed related to interprofessional education initiatives remain consistent" (p. 14). In this study, factors not addressed in the IECPCP framework, such as factors linked to participation in a continuing education workshop (e.g., motivation and expectations), influenced the level of engagement and the level of outcomes reported by the learners. For example, skills, attitudes, and practices were dependent on the social interactions that occurred between the learners and with the facilitator in the discussion forum. Moreover, the application of practices to stimulate change toward CPCP in the workplace was dependent on learners' engagement with the concept map activity. Consequently, recognising the factors that influence participation in discussions and various pedagogical approaches in the context of a continuing education workshop is crucial to the attainment of CPCP learning outcomes beyond the construction of knowledge.

Finally, the outcomes proposed by the IECPCP and JET frameworks are presented within the perspective of learning for the purpose of serving society (e.g., better quality of care with a

more effective use of human resources), rather than learning for the purpose of psychological development, cultural growth, and the betterment of humankind (Delors, 1996; Hall, 2006). Therefore outcomes such as active engagement, satisfaction, and sense of empowerment are not recognised by either framework even though these outcomes have the potential to influence the development of CPCP culture. As previously discussed in relation to the DDLM, factors external to the learning workshop, including participation, society, culture, and emotions, influence the outcomes of learning. The IECPCP framework should focus more adequately on the cognitive, social, and emotive factors associated with learning about CPCP.

Application of Emergent Findings from the Study

Valenti, Panti, and Leo (2003) emphasised that continual evaluation must inform the design, development, delivery, and evaluation throughout the lifecycle of a learning program. Therefore, the findings of this study regarding participation, structure, content, delivery, service, and outcomes prompted a number of changes that were applied in a subsequent iteration of the IECPCP eLearning workshop. Although the revised workshop was not part of the intrinsic case study, presenting a few highlights of the changes made and of the learners' online activity provides some insight about the potential relevance of this study. A brief description of the 10 most significant changes that were made to the IECPCP workshop based on the findings from this study, and a brief account of what happened when the workshop was offered in its modified version in January 2007 are presented in appendix AA.

CHAPTER 6

Conclusion

Ultimately, I wanted to explore how to design, develop, and deliver an eLearning continuing education workshop, the purpose of which was to help post-licensure healthcare providers interested in stimulating CPCP in their workplace gain the necessary knowledge, skills, attitudes, and, practices to do so. This final chapter examines the significance of this study's findings through the knowledge contributions that it has made in the fields of adult education, eLearning, and interprofessional education for collaborative patient-centered practice (IECPCP). I present the strengths and limitations of the study, and propose future directions for research on the topics of eLearning and IECPCP. Finally, I share personal thoughts on my journey through this study.

Knowledge Contributions to Adult Education

The nature of the IECPCP eLearning workshop in this intrinsic case study had its particular strengths and challenges. The workshop was a French-language, not-for-credit, eLearning continuing education program, offered at no cost to participants. Findings from this study indicated that in such circumstances, learner participation in the workshop can easily decrease, especially when learners are aware that they can register again for the workshop at a later date without incurring penalties. Although healthcare providers cited examples of intrinsic motivation as their primary reason for registering in the IECPCP workshop, they readily discontinued participation when life circumstances prompted them to reprioritize their workload, and when they encountered learning obstacles within the eLearning workshop. Knowles et al.'s andragogical model (2005) purported that adults were intrinsically motivated to learn, yet the findings of this study suggested that once healthcare providers were interested in an eLearning

program, extrinsic motivators were important to stimulate participation. Extrinsic motivators, such as release time and workplace recognition programs must be carefully managed to create a supportive learning context that capitalises on participants' readiness to learn.

Findings from this study also revealed that attention must be paid to learners' expectations about what online learning entails. These expectations directly impact their level of participation. Participants registered in the workshop with assumptions about how the learning workshop would appear, what pedagogical approaches would be used, and which type of activities would be included. Learners' assumptions were influenced by previous eLearning experience rather than the workshop's description. Approaches to learning used in the workshop that learners found to be different from what they had expected, such as the concept map and self-directed learning, potentially increased the cognitive load and impeded the learners' ability to manage the associated learning activities. Although Knowles et al. (2005) emphasised that learners were inherently self-directed in their approach to learning, Vygotsky (2004d) viewed self-directedness as a culturally mediated learning skill to be developed by learners through carefully progressed educational interventions. As a result, innovations in eLearning must be gradually implemented throughout the workshop using appropriate scaffolding so that learners may be eased into different ways of knowing and learning.

Finally, satisfaction with the learning workshop, impressions about eLearning, and reports of feeling overwhelmed were all emotional factors that learners who registered in the IECPCP workshop described. Not only did these emotions relate to the learners' eLearning experience, they also connected with their affective state, societal context, historical background, and environmental situation. According to Vygotsky, human psychology is a cultural phenomenon and learners cannot be dissociated from their socio-historical context when

researchers are attempting to understand how learning occurs. Whereas Knowles' andragogical model focused on learner-centric principles of learning, Vygotsky added the notion of individual, cultural, historical, and environmental elements merging together to form an integrated learning system. A deeper understanding of this learning system could lead to better, more culturally relevant eLearning design and positively influence levels of participation.

Knowledge Contributions to ELearning

This intrinsic case study provided in-depth information about issues pertinent to structure, content, delivery, and service that could help guide the process of designing continuing education IECPCP eLearning workshops for healthcare providers in Canada.

Structure

In terms of structure, the findings showed that organised culture influenced learning. The workshop was an agent of mediation, a series of scaffolds that guided the learning venture. This venture needed to be culturally relevant, beyond the use of culturally specific examples already presented throughout the workshop (such as different clinical settings or different professionals) and extend to the societal concerns and modes of functioning specific to healthcare providers in Canada. These concerns and modes of functioning included finding a culturally acceptable length for the workshop and choosing a time of year to offer the workshop that reflected common perceptions around personal and workplace obligations. Societal issues were part of the learning system as they represented cultural artefacts and mediators of the learning process. For example, after their experience with the eLearning workshop, learners were able to identify that six weeks was a desirable length of time for a continuing education learning event. Learners also expressed that they wanted a comprehensive array of learning materials while still indicating that it was preferable to develop a series of six-week workshops rather than increasing the density of

one learning workshop. Learners further voiced that continuing education eLearning workshops should not be offered to healthcare providers in the months of May to September. Failure to recognise these cultural characteristics in future iterations of the workshop will make it difficult to adequately respond to the learning needs of healthcare providers in Canada.

Once learners engaged in the IECPCP eLearning workshop, most mediational means (animation, video, narration, etc.) presented appropriate scaffolds within the learners' ZPD. Learners reported that the wide variety of media maintained their interest and acted as motivators for participation. To help learners stimulate change in the workplace, many online activities revolved around the concept map, one of the main pedagogical strategies developed for the workshop. Although a series of scaffolds was built into the concept map activity, this pedagogical strategy seemed to extend beyond many learners' current learning ability and beyond their ZPD. Learners who participated in the study recommended a more progressive introduction to the concept map activity and suggested a two-level workshop structure for future participants. Although a second iteration of the workshop was not part of the intrinsic case study, the level of participation in the revised workshop showed that separating the workshop into two levels and placing the concept map as the central activity of the second level workshop stimulated more commitment from the registered learners. In fact, eight out of nine learners completed the concept map activity in the subsequent workshop. The concept map activity was more appropriately scaffolded in the second iteration of the workshop, leading to an increased level of commitment to the concept map activity. The first level of the workshop probably helped learners build their readiness to learn with a concept map and offered the possibility for learners to choose whether or not they wished to register in the second level of the workshop to attempt planning for change using a concept map.

Learner-to-learner and learner-to-facilitator interaction within the discussion forum was another central activity of the IECPCP eLearning workshop. According to Vygotsky, interaction is crucial to the learning process as it allows learners to move from interpersonal learning to intrapersonal learning followed by subsequent interiorisation (Meshcheryakov, 2007). From a sociocultural perspective, interaction therefore strengthens the learning process. Unfortunately, not all workshop participants took advantage of the social learning space because their participation in the various workshop activities was not compulsory. According to the core principles of adult learning proposed by Knowles et al. (2005), adults have the right to self-determination and should not be forced to participate in learning activities as this would interfere with the learning process. Findings from this study indicated that most learners appreciated the flexible nature of the workshop and the ability to complete only the activities that appealed to them. For example, most learners did not complete the pre- post-workshop reflection activities designed to help them self-evaluate throughout the workshop. Some learners reported being more familiar with traditional evaluation methods and did not readily embrace self-evaluation tools. Rather than impose participation in various activities, andragogy suggests preparing adult learners by educating them about the purpose of various learning tools so that they may in turn choose which strategies best meet their individual learning needs.

Content

The content developed for the IECPCP workshop was well received by learners. They stated that they viewed the information in the workshop to be authentic, evidence-based, and related to their own personal situations. Through their interaction with the various learning activities, learners reorganised and reshaped information based on their own individual interpretations, thus showing signs of interiorisation of the workshop's concepts. However, many

learners reported that the use of technical language to describe the steps of the concept map activity was a deterrent to their participation. Although the production team and I had paid particular attention to describing each step in lay terms, the titles of each step used academic terms found in the literature on the topic of concept maps. Because learners could not match the words used to describe each step to the appropriate concept, they developed the impression that the concept map activity was too difficult for them to complete. Many learners did not read the explanations or attempt to pursue the concept map activity. Plain language must be used instead of technical or academic language, especially in titles or organisation pages, to increase the likelihood that learners will attempt various learning activities.

Delivery

Delivery is the moment of truth for any eLearning program. It is during the course of delivery that learners compare their experience against their expectations and learning preference and truly assess whether their learning needs are being met. Participants' interaction with the eLearning workshop must be monitored continuously and participants must be given the opportunity to voice their level of satisfaction with the learning experience. In this intrinsic case study, learners reported during the course of the workshop that eLearning was a desirable learning approach. It seemed to correspond to the participants' need for flexibility and accessibility even though many reported a preference for a f2f format and viewed eLearning as more work.

Learners who participated in the discussion forum stated that facilitation was an important component of eLearning. This intrinsic case study demonstrated that facilitation can influence the learners' interest in the various learning activities and stimulate further development of the learners' thought process by operating within the learners' ZPD. Findings

from this study also indicated that learner-to-learner interactions increased when the facilitator temporarily removed herself from the discussion. In these instances, learners relied on more abled peers to scaffold their learning process and questioning, reflection, and discussion increased.

Service

In this study, the reputation of the learning organisation offering the IECPCP eLearning workshop was a motivator for registration. Once learners were registered, technical support for registration through to delivery was still necessary to stimulate their participation. The findings revealed that in a not-for-credit continuing education workshop, participants do not necessarily act when they require technical help, making it difficult to support them through the learning process. Personal or workplace obligations seemed to take precedence over spending the time to work through technical problems, and some learners opted to withdraw participation rather than attempt to solve their technical problem. It is therefore essential to devise effective monitoring procedures to quickly identify participants who are delayed in logging on to the website for technical reasons. Reminding these learners that they do have access to technical support may facilitate their ability to deal with technical difficulties that arise. From an andragogical perspective, such a reminder should be done without intruding on the learners' right to choose whether they want to participate in the workshop or not.

DDL

Based on the findings of this study and as advanced by the DDL (MacDonald et al., 2001), the IECPCP workshop's structure was central to the eLearning experience and all of the other constructs (content, delivery, service, and outcomes) were grounded in the structure. Some authors (see for example Valenti et al., 2003) have argued against models such as the DDL,

which proposes a linear course for designing eLearning spaces. This study revealed that there was a chronology of steps to respect throughout the process from design to evaluation. For example, one can plan the design of a social space for learning within the structure of the workshop but cannot adapt facilitation strategies until the eLearning workshop is delivered. The DDLM therefore makes a strong case for respecting the chronicity of events that occur during the design, development, delivery, and evaluation of an eLearning workshop while still proposing that continual adaptations be made. However, the findings from this study suggest that the DDLM should embrace the learners' socio-historical environment and consider the learners' social, cultural, and emotional needs as being an integral part of the learning system.

Another issue that emerged from this study was that although the needs analysis informed the IECPCP workshop's design, participants were only able to accurately voice their needs in terms of structure, content, delivery, and service once they began to experience the learning event. Adaptation through multiple iterations of an eLearning workshop should therefore be added to the DDLM. It follows that when considering the funding structure and sustainability of future IECPCP eLearning endeavours, workshop developers must plan one or more evaluation methods to validate the learning experience and prepare new and adapted versions of the eLearning workshop.

Knowledge Contributions to IECPCP

This intrinsic case study demonstrated that it is possible for learners to perceive that they have developed or increased their CPCP knowledge, skills, attitudes, and practices in a six week, not-for-credit continuing education workshop. However, the level of outcomes reported by learners was linked to their participation in the discussion forum and to the concept map activity.

Only learners who had completed at least one or more units of the workshop expressed having constructed new CPCP knowledge. The learners' self-reported examples of CPCP knowledge were linked to events that occurred in the workplace. Learners also constantly compared their level of understanding and events that occurred in their workplace in the discussion forum. This comparison led to evolving interpretations of CPCP concepts. According to Vygotsky's (2004c) work, the knowledge constructed by learners in the workshop represented the expansion of their psychological development through interiorisation and was a glimpse into their thought structure.

Examples of increased skills were only reported by learners who participated in the discussion forum. The reported examples of skills in this study symbolised the decontextualisation of meditational means presented throughout the workshop. In fact, the examples rarely resembled the situations presented in the workshop. The development of new skills likely occurred because these learners moved from the independent online activities to interaction within the discussion forum, and this progressed the meditational means within the learners' ZPD. The independent interactive exercises thus represented the first level scaffold and the discussion forum represented the second level scaffold, otherwise called double stimulation (Engeström, 2007). Attitudes were also only reported by learners who had interacted in the discussion forum. From a sociocultural perspective, attitudes require an interiorisation within the affective domain, so the learners' increased participation in the discussion forum, a social space, led to new attitudes conducive to CPCP.

Only learners who completed at least some of the concept map activity reported examples of having developed new CPCP practices. Because the concept map represented a higher form of learning, it stimulated the development of higher forms of behaviours as well, in this case CPCP

practices. For new CPCP practices to be attainable for the workshop participants, the concept map activity had to be within the learners' ZPD, otherwise this activity was immediately abandoned. In this study, exposing learners to situational conditions under which they could transform their CPCP knowledge, skills, and attitudes into CPCP practices was crucial. Indeed, learners who did not share their thoughts in the discussion forum and did not participate in the concept map activity were probably not exposed to enough situational conditions to develop the motives and means for developing CPCP practices.

When interpreted using the JET framework, the findings from this intrinsic case study suggested that the learners' self-reported examples reached such practice outcomes as organisational change. By focusing only on learning outcomes (knowledge, skills, attitudes, and practices), the IECPCP model does not overtly consider practice outcomes to be relevant to continuing education. This study suggested that the IECPCP model's outcomes should bridge education and practice by aligning with the JET framework. In addition, the learners' environment, as well as societal, cultural, and emotional factors, all played a role in learner participation and subsequent learning outcomes and should also be included in the IECPCP model.

Strengths of the Study

This study tracked the design, development, delivery, and evaluation of an IECPCP eLearning workshop rather than just evaluating an existing eLearning workshop. This provided an insider's perspective on the process of producing an IECPCP workshop that wouldn't otherwise have been available. The detailed examination of production decisions made along the way informed the interpretation of the learners' experience of the workshop and strengthened the triangulation of the study's findings.

Part of the originality of the IECPCP workshop was that it grouped together individuals who worked in very diverse settings across Canada to learn about a common topic. Preparing individuals to work more effectively in teams without having to train each team member is part of the solution, according to Freeth, Hammick, Reeves, Koppel, & Barr (2005), to building a critical mass of CPCP-trained healthcare providers in the workplace. Otherwise, it can be daunting to devise sustainable IECPCP programs that focus on teams because members often change. Freeth et al. suggested that reoccurring training programs have more potential for success by progressively building CPCP practices within teams, particularly in teams with high staff mobility. In fact, based on the self-reported examples of outcomes provided by learners involved in this study, it is possible to develop CPCP knowledge, skills, attitudes, and practices that have the potential to stimulate change in the workplace. Very few learning programs aimed at preparing IECPCP educators have been documented, and the use of a concept map to help learners plan for change was an innovative pedagogical approach.

Finally, the workshop developed in this study was produced in partnership with the CNFS, a recognised learning organisation, which allowed for the production of a sustainable learning workshop that will benefit many learners for years to come. The workshop is not dependant on research funding and will continue to be offered and revised by the learning organisation as long as it continues to meet the needs of the target population. Association with recognised learning organisation also means that, in the context of this study, learners who registered in the workshop were intrinsically motivated to do so, and did not register *because* it was a research study. The promotional materials, the registration process, and the facilitation strategies were the same as those used for all other workshops offered by the CNFS. This congruence with other CNFS offerings increased the authenticity of the study's findings because

the case study provided a realistic glimpse into the lived realities of healthcare providers who register in online continuing education workshops.

Limitations of the Study

This intrinsic case study explored the design, development, delivery, and evaluation of an IECPCP eLearning workshop aimed at helping healthcare providers stimulate CPCP change in the workplace through the perceptions of 31 participants. Because the workshop's outcomes were limited to self-reported examples, this study was not able to demonstrate or measure whether knowledge, skills, attitudes or practices were in fact translated to the workplace. Furthermore, if the purpose of CPCP is to deliver effective and efficient services to patients and families through the best use of human resources, this study was not able to conclude whether this goal can be supported through the use of an IECPCP eLearning workshop. A collective case study design may have yielded a more comprehensive account of the effectiveness of an IECPCP eLearning workshop to influence CPCP change in the workplace.

From a practical perspective, the reasons that many learners chose not to answer the pre- and post- workshop reflections, or chose not to participate in many of the study's data collection methods, were not specifically explored. It would have been interesting to examine learners' motivations for choosing to participate in one aspect of the workshop or the study and not another. This issue was not addressed during the interviews to avoid coercing learners into providing a justification about their chosen level of participation in the workshop or study, and in turn risk stimulating feelings of guilt for not participating. There had been many communications by email and on the website itself to encourage learners to participate in the various aspects of the workshop or study, and not participating was clearly a choice that some learners made.

This rationale for not pursuing the reasons for non-participation in the study's data collection methods during the interviews highlights the tension that exists between being the investigator of a study and being an active participant in the study. One could question where the learners' perceptions end and where the investigator's begin. In a socioconstructivist, interpretive study one could argue that there is no delineation, that the interpretation of findings must be a co-creation of meaning. Still, in this study, learners' experiences were interpreted from my vantage point of an insider looking out rather than from an outsider looking in. This intrinsic case study is therefore a version of reality as seen through my eyes, as the workshop facilitator and the investigator, and the data may be interpreted quite differently from another's perspective.

Future Directions for Research

Professional development and in particular not-for-credit, continuing education is an area of eLearning that is not well documented. More research is needed to provide educators with optimal practices for workshop design, development, delivery, and evaluation that will closely correspond to the learners' needs and thus maximise learners' participation (Schwier, 2006).

Methods for evaluation of outcomes is also an area that needs to be developed in both eLearning and IECPCP. How should outcomes be measured and with which model? The qualitative approach answers the question "did it work for you?" because the data originates from the learners' perspective. There are others who want to know "what works?" so they can generalise the information to the population of healthcare providers. In their systematic review of IECPCP literature, Freeth et al. (2002) found more quantitative than qualitative studies and called for more interpretive and critical studies. Zwarenstein and Reeves (2006) on the other hand, reported that the quantitative studies were of poor methodological quality and called for more rigorous quantitative studies. Regardless of my own personal assumptions on the matter, I

suggest we need to answer the question “what works?” if it keeps being asked. Therefore, outcomes from rigorous quantitative designs, such as randomised controlled trials, would add another dimension to our understanding of eLearning and IECPCP.

There is also a need for more longitudinal and prospective studies to track changes in outcomes over time that occur as a result of IECPCP programs (Freeth et al., 2002). These types of studies could serve to help us answer questions such as:

- What kind of support do learners need to implement what they have learned about CPCP?
- How can healthcare providers overcome barriers in the workplace once they are CPCP-trained?
- Which work conditions need to be put in place for post-IECPCP change to occur?
- What IECPCP education programs lead to sustainable change?

Finally, large scale studies on adult learning in the context of eLearning and other emerging technologies such as mobile learning or m-learning (e.g., using smart phones) need to be conducted to continue theorisation about adult learning principles in a technological era. Vygotsky’s sociocultural theory, Knowles’ andragogical model, the DDLM, and the IECPCP framework need to be considered in more studies to verify their assumptions, particularly in the field of eLearning for healthcare providers.

A Personal Reflection

A colleague once said, “You know you’re completing a PhD when you try to connect everything that happens around you with what you are studying”. This comment certainly applies to my situation. Because I evolved in a discipline other than education, in the past years I struggled to quickly grasp concepts, theories, and paradigms of education while trying to master

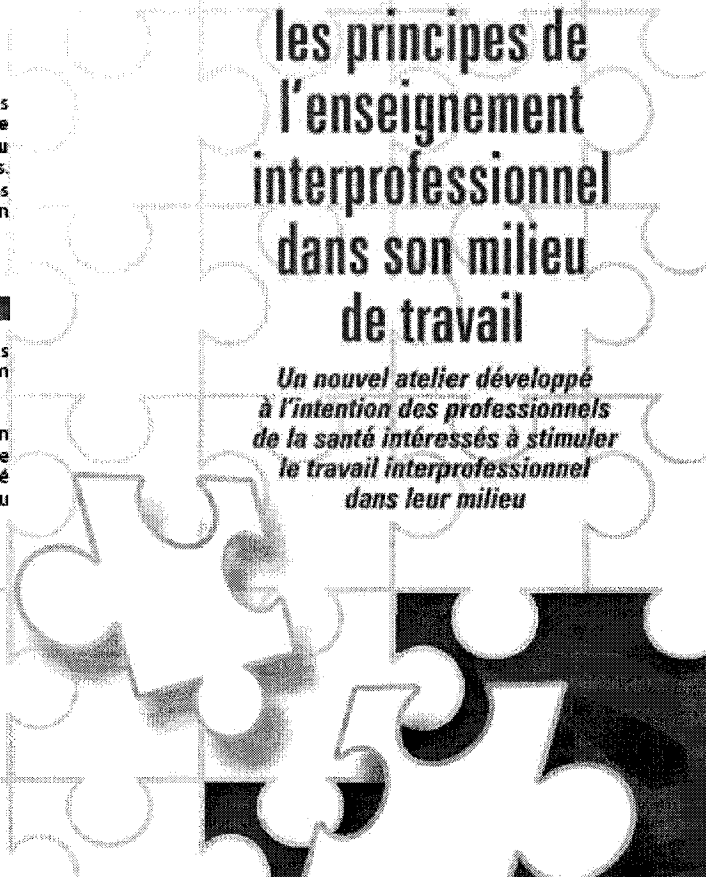
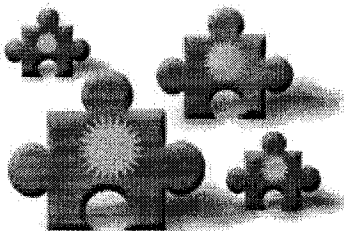
my area of study. I imagined myself as something akin to a sponge, soaking up anything and everything that happened around me that seemed remotely relevant to continuing education, adult education, eLearning or IECPCP.

From an educational perspective, I have grown as an educator. These past years have motivated me to analyse my personal assumptions about learning and have influenced the development of my educational programs. I now recognise that I value a mix of cognitivist, constructivist, and socioconstructivist approaches to learning, and prepare learning events that are cohesive and congruent to a chosen pedagogical stance. Reconciling my views on learning with my desire to respect learners' preferences is still an area of intrapersonal conflict. Although I wish to adhere to learner-centered, self-directed pedagogy with particular focus on teamwork and collective meaning-making, these approaches do not necessarily correspond with learners' views. Am I imposing my own epistemological stance when I choose a particular pedagogical approach for learners? Is this what happened in this study with the concept map activity? I find that learning theories can appear quite wonderful in the literature and still be very difficult to apply.

eLearning, in a sense, has been a testing ground for different pedagogical approaches. eLearning is an area that, for some reason, seems to be more receptive to innovative teaching and learning, or what appears to be innovation. In fact, reflective learning, self-directed learning, concept maps, and the like have been documented in the literature for decades. Perhaps what is novel is that these approaches are more readily accepted in eLearning workshops because the container is just as innovative as the content. We must therefore continue to forge ahead using eLearning as a vehicle for change.

Innovation is also the main theme in CPCP since it represents the adoption of an emergent perspective of care. Not only do I want to change the way learners in healthcare perceive their own learning processes, I am also trying to change popular conceptions about how to deliver care. This intrinsic case study has enabled me to make connections between educational principles, IECPCP, and eLearning, but I am still struggling with the idea of best practices in each of these domains. Best practices imply that there is a truth out there to understand and to impart to others, and I question this assumption. My socioconstructivist stance leads me to think that studies are mirrors reflecting distorted images of what could be out there, but not necessarily what is. I will therefore continue to share ideas about CPCP rather than educate about a known truth, and attempt to bring learners to seek their own understandings of learning and collaborative practices in healthcare.

If there is one thing that I have learned throughout these past years, it is that my understanding of learning is ever-changing. As Vygotsky's writings changed from one text to the next so will my assumptions about knowledge. My views on learning today, as I have outlined them in this thesis, will change tomorrow through my social interactions and the ongoing development of my thought process. I am looking forward to discovering how this story evolves, and I am already grateful to everyone who will contribute to my new understanding.



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C'est par le biais d'activités interactives, de partage d'expériences et de discussions ciblées que vous serez amenés à créer un plan individualisé d'application ou d'enseignement interprofessionnel, lequel tiendra compte des écrits récents à ce sujet. Ce cours est conçu pour offrir un environnement d'apprentissage propice à la réflexion, à la structuration et à la collaboration.

La formation s'adresse aux professionnels de la santé engagés dans la formation clinique ou académique des étudiants et des collègues de travail, ainsi qu'aux administrateurs, aux chefs d'équipe ou tout autre professionnel intéressé à stimuler le travail interprofessionnel dans son milieu.

OBJECTIF

L'objectif général de l'atelier est d'apprendre comment enseigner l'interprofessionnalisme. Nous commencerons par définir les termes et les concepts, pour ensuite traiter de l'utilité de l'interprofessionnalisme, ainsi que des défis et des stratégies d'implantation. À la fin de cet atelier, vous aurez construit un schéma qui représente votre plan d'implantation de l'interprofessionnalisme dans votre milieu de travail.

PROFIL DU PARTICIPANT

Le participant sera un professionnel de la santé avec de l'expérience clinique ou en enseignement dans son domaine. Ce dernier devra avoir un intérêt à l'égard du travail interprofessionnel et juger son intégration importante au travail d'équipe efficace et à la prestation des soins de qualité.

L'enseignement selon les principes de l'interprofessionnalisme suppose un travail de réflexion individuelle et d'auto-apprentissage. De plus, pour apprendre, il est nécessaire de partager ses réflexions avec l'ensemble du groupe. Par conséquent l'apprenant sera appelé à discuter, lire, paraphraser et défendre ses idées en utilisant une communication efficace.

THÈMES CIBLÉS

Au cours de cette formation, les apprenants exploreront les thèmes suivants :

- identité et frontières professionnelles
- terminologie et définitions du travail en collaboration
- événements clés et mouvement vers l'interprofessionnalisme
- caractéristiques de la formation interprofessionnelle
- mise en œuvre d'un plan d'implantation de la formation interprofessionnelle

Appendix B: Needs analysis (English version)

Demographic information:

1. Tell me about yourself?
 - a) What is your profession?
 - b) In what healthcare sector do you work in?
 - c) How long have you been working in your field?
2. Tell me about your team?
 - a) Who are the team members with whom you work closely with to provide patient care?

Structure:

3. Do you consider that the healthcare professionals with whom you work with interact in an interprofessional way? Why or why not?
4. What would improve interprofessional collaboration in your workplace?
5. What are some of the biggest obstacles to interprofessional collaboration in your workplace?
6. What approach or strategy do you use to stimulate interprofessional collaboration in your workplace?
7. What needs to be considered when designing a course intended for educators about interprofessional practices? You can take into account the design, the length of the workshop or other factors of this type.

Content:

8. Do you think that people you work with understand what interprofessional collaboration is?
9. Have you heard of "Interprofessional collaborative patient-centered practice (CPCP)" or "Interprofessional education for collaborative patient-centered practice (IECPCP)"?
10. What information about interprofessional practices would help you be a more effective team member and deliver better healthcare services?
11. What concepts should be covered in a workshop intended for educators on interprofessional practices?

Delivery:

12. Do you have any concerns about learning/doing a workshop on interprofessional practices online? If so what are they?
13. What type of interactive activities would you like to have to better understand the content and to interact with other learners in the workshop? For example, would you like to have animated explanations, discussion forums, chat sessions (in real time), team exercises, individual exercises, or tests?
14. Usually, where are you when to access an online workshop? Would you access the workshop at work, at home or somewhere else?
15. What is the ideal amount of time to spend online every time you access a workshop? For example half an hour, an hour?
16. What role would you like to see the facilitator take? You can name more than one.

Service:

17. What support do you feel you would need (technology support or other) in order to make your participation in an online workshop on interprofessional practices successful?
18. What do we need to know about your workplace reality as we develop this online workshop on interprofessional practices?
19. Do you have any other comments that may help in the design and delivery of the course?
20. What would you like to learn in this kind of workshop?

Appendix C: Pre-workshop survey (English version)

Demographic information:

1. Gender:
2. Profession:
3. Job title:
4. Age group: 20-29 30-39 40-49 50-59 60-69
5. What healthcare sector do you work in?
6. How long have you worked as a practitioner _____ and or and educator _____?
7. Who are the team members with whom you work closely with to provide patient care?

Computer use:

8. How would you describe your computer use? (Choose ONE answer)

- ☐ Beginner – I have never used a computer.
- ☐ Novice – I use the computer occasionally (i.e., for emails, word processor, games, surfing).
- ☐ Intermediate – I use the computer everyday (i.e., for emails, word processor, games, surfing).
- ☐ Experienced – I use the computer everyday at work (i.e., for emails, word processor, Internet information).
- ☐ Expert – I use the computer everyday at work (i.e., for emails, word processor, Internet information) and I can install software or shareware, fix my own computer problems and can do a bit of programming.

Structure:

9. Why did you enrol in this workshop?
10. How do you think this workshop will benefit you in your work?

Content:

11. Identify the benefits of working in a team with people from different disciplines or professions:
12. Identify the difficulties you have experienced working in a team with people from different disciplines or profession:

Delivery:

13. *Complete this sentence:* The advantages of doing this workshop online (by computer) are:
14. *Complete this sentence:* The disadvantages of doing this workshop online (by computer) are:

Service:

15. How would you describe your attitude toward computers? (Circle ONE answer) very positive, positive, unsure, not positive
16. Do you have any concerns about following this workshop online (by computer)?
17. Have you ever taken an online course or workshop before? If Yes, what was (were) the course(s) and what type of activities did you do?

Outcomes:

18. *Complete this sentence:* I expect to learn the following things in this workshop:

Appendix D: Temperature check (English version)

Likert scale: Strongly disagree, Disagree, Strongly agree, Agree, Not applicable

Structure:

1. At this time in the workshop I feel it was easy to understand what I was supposed to do.
2. The work was too easy.
3. The pace was too fast.
4. The buttons on the screens did what they were supposed to do (e.g., links to web-sites).
5. It was easy to "navigate" through the content.

Content:

6. Up to this point, the workshop respected my experience and current knowledge.
7. What, if anything, did you learn up to this point in the workshop that helped you work better in an interprofessional team or teach better how to work in an interprofessional team? (Short answer question)

Delivery:

8. Up to this point, I feel the workshop kept my interest.
9. Up to this point, I have enjoyed participating in the discussions.
10. Up to this point, I had time to read all the messages posted in the discussion forum.
11. The facilitator was helpful.
12. At this time in the workshop I feel that the facilitator got back to me quickly when I asked for information.

Service:

13. Up to this point, computer support was easy to get when I needed.

Outcomes:

14. At this time in the workshop I have developed new knowledge.
15. At this time in the workshop I have developed new skills as an educator of interprofessional practice.
16. At this time in the workshop I have changed or adapted my views on CPCP.
17. At this time in the workshop I have tried new teaching strategies to stimulate CPCP at work.
18. At this time in the workshop I feel that I have delivered a better service to the people (students/employees/patients) I teach or train at work.
19. At this time in the workshop I feel that I work more effectively with my healthcare team.

Short answer question:

20. How could the workshop be improved?

Appendix E: Post-workshop survey (English version)

Likert scale: Strongly disagree, Disagree, Strongly agree, Agree, Not applicable

Structure:

1. The icons and links worked as they were intended.
2. It was easy to "navigate" from one content page to the next.
3. I had the opportunity to interact with other workshop learners.
4. The material on the site was uncluttered.
5. The material on the site was organised so it was easy to find things.
6. The workshop increased my confidence in stimulating CPCP.
7. The content and learning activities are supported the course objectives.
8. I had the opportunity to reflect.
9. I had the opportunity to self evaluate.
10. The workshop activities provided opportunities to apply what I learned.

Content:

11. The content was too difficult to understand.
12. The content used language too difficult to understand.
13. The content was well organised.
14. The content was useful for my work.
15. The content included useful online resources.
16. The content was presented in an interesting manner.
17. The material on the site was boring.
18. The workshop respected my experience.
19. The workshop respected my current knowledge.
20. The course met my personal learning objectives.

Delivery:

21. The course kept my interest.
22. I enjoyed participating in the discussions.
23. I found learning online was more convenient than going to a class.
24. I did not have any difficulty to access a computer to do the work.
25. The facilitator provided feedback promptly.
26. The workshop expectations were clear.
27. The facilitator gave realistic and relevant examples.
28. The facilitator considered and respected my opinions.
29. The facilitator made me aware of where I needed to improve.
30. The workshop was in line with my expectations.

Service:

31. Administrative and technical support was provided by knowledgeable individuals.
32. Administrative and technical support was provided quickly.
33. The facilitator got back to me quickly when I asked for information.
34. The facilitator reacted quickly when I made a suggestion.
35. The facilitator quickly handled complaints.

Outcomes:

36. As a result of my participation in this workshop, I have developed new knowledge as a CPCP educator.
37. As a result of my participation in this workshop I have gained skills as a CPCP educator.

- 38. As a result of my participation in this workshop I have changed my attitude with regards to CPCP.
- 39. As a result of doing this workshop I have applied new CPCP skills and strategies in my work.
- 40. As a result of my participation in this workshop I have had new ideas on how to teach or stimulate CPCP.
- 41. As a result of my participation in this workshop, I feel I have delivered a better service to the people (students/employees/patients) I teach or train at work.
- 42. As a result of my participation in this course I feel I have worked more effectively with my healthcare team.

Short answer questions:

- 43. What did you like about this online learning experience?
- 44. How do you feel this online learning experience could be improved?
- 45. Do you feel that this workshop will be helpful to you in your teaching?

Appendix F: Post-workshop interview - Learners (English version)

Structure

1. What was your experience with the IECPCP workshop? (probe with regards to content, delivery, service, and structure). What was it like to work in collaboration with others online?
2. What was the most rewarding or satisfying aspect of the workshop?
3. What was the least rewarding or satisfying aspect of the workshop? How could it be improved? If you could change one thing about the workshop, what would it be?
4. What was the most challenging aspect of the workshop?

Content

5. What motivated you to do the workshop activities? (e.g., exercises, temperature checks, etc.)
6. What held you back from doing the workshop activities (for example readings)?

Delivery

7. Where were you when you logged on to the workshop? (e.g., at home, at work, where at work). Did you establish a routine for how you approached this workshop?
8. On average, how long was each of your learning sessions? Was this an optimal amount of time? What did you tend to do in each session (e.g., logging on, reading text based material, reflecting, etc)? Walk me through it.
9. Online programs are still fairly new. Do you have any comments in general about the delivery of online workshops?

Service

10. Would you recommend eLearning to your colleagues?

Outcomes

11. Have you used the new knowledge and skills that you learned in this workshop at work? If so, can you give me an example of this? Was there anything that you learned in this workshop that you would like to put into practice but are unable to? If so, why?
12. Do you feel you are able to provide a better service to the patients you care for or the students/employees/you work with because of this workshop? If so, in what ways?
13. Do you feel that you are working or would work better in an interprofessional team because of this workshop? If so, in what ways? What parts of the workshop helped you work better as a team?
14. Do you feel that your attitude toward IECPCP has changed because of this workshop?
15. How, if at all, did you share what you learned in the workshop with your colleagues?

Appendix G: Post-workshop interview – Production team (English version)

Structure

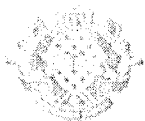
1. What was your experience with the production of this IECPCP workshop? (probe with regards to content, delivery, service, and structure).
2. What motivated you to want to work on this project? (what were your feelings about being assigned to this project?)
3. Talk to me about your collaborative experience (team work) developing this workshop?
4. In your opinion, what was the impact of our way of functioning on the production of this workshop?
5. Talk to me about the concept map. Why did you choose to integrate this activity?
6. What was the most rewarding or satisfying aspect of developing this workshop?
7. What was the least rewarding or satisfying aspect of developing this workshop?

Content

8. Talk to me about the time and energy that you spent on developing this workshop. Was this typical of your other experiences?
9. Are there any concepts or strategies that you learned developing this workshop? If so, did you apply them?
10. Have you changed or modified your vision of collaborative patient-centered practice (CPCP) since you participated in the development of this workshop?
11. Talk to me about the challenges you faced developing this workshop.
12. Talk to me about the facilitating factors you met developing this workshop.

Learner participation

13. Participants have told me that the concept map was a difficult activity. How do you react to this comment?
14. How should we improve the workshop? If you could change one thing the workshop, what would it be?



Appendix H

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Service de subventions de recherche et d'éthologie Research Grants and Ethics Services

SOCIAL SCIENCES AND HUMANITIES RESEARCH ETHICS BOARD

CERTIFICATION OF ETHICAL APPROVAL

This is to certify that the University of Ottawa Social Sciences and Humanities Research Ethics Board (REB) has examined the application for ethical approval for the research project **Assessment of an E-Learning Experience Designed to Facilitate Interprofessional Collaborative Patient-Centred Practice (ICPCP) (File # 01-06-06)** submitted by Lynn Casimiro and supervised by Colla Jean MacDonald of the Faculty of Education. The members of the REB found that the research project met appropriate ethical standards as outlined in the Tri-Council Policy Statement and in the Procedures of the University of Ottawa Research Ethics Boards, and accordingly gave the research project a Category Ia (Approval).

This certification is valid for one year from the date indicated below.

February 15, 2006

Catherine Paquet Date Protocol Officer for Ethics in Research For the Chair of the Social Sciences and Humanities REB Richard Clément



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Appendix I

Formulaire de consentement – Analyse des besoins

Titre du projet :

Évaluation d'un événement d'apprentissage en ligne conçu pour stimuler la formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP)

Chercheure :

Lynn Casimiro pht., M.A.
Candidate au doctorat
Faculté d'éducation - Université d'Ottawa
et
Coordonnatrice de projets
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451, chemin Smyth
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Superviseure :

Colla Jean MacDonald Ph.D.
Professeure titulaire
Faculté d'éducation - Université d'Ottawa
Pavillon Lamoureux, salle 417
145, rue Jean-Jacques-Lussier
Ottawa (Ontario)
K1N 6N5
Tel. : (613) 562-5800 poste 4110
Télec. : (613) 562-5428
Courriel : cjmacdon@uottawa.ca

Invitation à participer : Je suis invité(e) à participer à la recherche nommée ci haut qui est menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald.



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But de l'étude : Le but de l'étude est d'explorer ce qui semble fonctionner le mieux pour concevoir, produire, animer et évaluer un atelier en ligne au sujet du travail interprofessionnel. Les chercheuses espèrent que cette étude les aidera à identifier les types d'activités d'apprentissage en ligne qui contribuent à augmenter les connaissances, les habiletés et les attitudes à l'égard de la « pratique en collaboration centrée sur le patient (PCCP) » et que les données recueillies serviront de guide pour le développement d'autres ateliers en ligne.

Participation : Ma participation consistera essentiellement à compléter un questionnaire d'analyse des besoins par courriel. L'analyse des besoins est la première étape de ce projet de recherche. Les autres étapes consisteront en l'évaluation de l'atelier comme tel. Le questionnaire comporte 22 questions à réponses courtes et prendra environ 45 minutes à compléter. Mes réponses sont confidentielles. Je peux participer à l'analyse de besoin sans être intéressé à m'inscrire à l'atelier une fois qu'il sera complété.

Risques : Je comprends que puisque ma participation à cette recherche implique que je partage des expériences de travail personnelles, qu'il est possible qu'elle suscite des réactions négatives envers mon employeur, mes collègues ou ma situation de travail. J'ai reçu l'assurance des chercheuses que je n'ai pas besoin de répondre à toutes les questions et que je n'ai pas besoin de compléter le questionnaire si je ne me sens pas à l'aise de continuer. Je peux également choisir de ne pas soumettre mes réponses une fois que le questionnaire est complété et ce, sans fournir d'explication.

Bienfaits : Ma participation à cette recherche guidera le développement de la structure, du contenu, de la modalité d'enseignement et de l'évaluation d'un atelier en ligne intitulé « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail ». Cet atelier ciblera les professionnels de la santé impliqués dans la formation clinique ou académique des étudiants et des collègues de travail, ainsi que les administrateurs, les chefs d'équipes ou tout autre professionnel intéressé à stimuler le travail interprofessionnel dans son milieu. Par le biais d'activités interactives, de partage d'expériences et de discussions ciblées, les participant(e)s de l'atelier seront encouragé(e)s à créer un plan individuel pour appliquer ou enseigner les notions interprofessionnelles apprises.

Confidentialité et anonymat : J'ai l'assurance des chercheuses que l'information que je partagerai avec elles restera strictement confidentielle. Je m'attends à ce que mes réponses ne soient utilisées que pour le développement de l'atelier en ligne « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail ». Cet atelier sera produit par le Consortium national de formation en santé (CNFS) – volet Université d'Ottawa et sera offert gratuitement à tous les professionnels de la santé francophones ou francophiles du Canada intéressés à le suivre. Le CNFS est financé par Santé Canada. Je comprends que les chercheurs analyseront toutes les réponses reçues pour en ressortir des thèmes communs (par



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exemple, durée de l'atelier et contenus suggérés). Ce sont ces thèmes qui seront communiqués à l'équipe de production. de l'atelier et mon nom ou mes coordonnées personnelles ne seront pas liés aux documents partagés. Mon identité ne sera jamais révélée dans les publications puisque seulement les thèmes identifiés seront présentés.

Conservation des données : Les courriels seront sauvegardés sur un disque compact. Les formulaires de consentements et le disque compact seront gardés sous clés dans un classeur dans le local 3021A du Pavillon Roger Guidon pour une période de 5 ans ou moins selon les exigences des maisons d'éditions. Seules Mme Lynn Casimiro et sa collègue de travail, Mme Lucie Couturier, coordonnatrice de projet du CNFS et membre de l'équipe de production de l'atelier en ligne ont accès à ce local. Toutes les copies des courriels imprimés seront déchiquetées immédiatement après leur utilisation.

Participation volontaire : Ma participation à cette recherche est volontaire et je suis libre de me retirer en tout temps ou refuser de répondre à certaines questions, sans subir de conséquences négatives. Je pourrai m'inscrire à n'importe quel atelier offert par le CNFS – volet Université d'Ottawa sans subir de préjudice puisque le processus d'inscription est géré par d'autres personnes que les chercheurs. Si je choisis de me retirer de l'étude, après avoir envoyé mes réponses, les données recueillies jusqu'à ce moment seront effacées de l'ordinateur.

Acceptation : Je, _____, accepte de participer à cette recherche menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald de la Faculté d'éducation.

Pour tout renseignement additionnel concernant cette étude, je peux communiquer avec la chercheuse ou son superviseur.

Pour tout renseignement sur les aspects éthiques de cette recherche, je peux m'adresser au Responsable de l'éthique en recherche, Université d'Ottawa, Pavillon Tabaret, 550, rue Cumberland, pièce 159, (613) 562-5841 ou ethics@uottawa.ca.

Mme Lynn Casimiro conservera la télécopie de mon formulaire de consentement et je peux garder la copie originale.

Signature du participant : _____ Date : _____

Signature du chercheur : _____ Date : _____

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Appendix J

Formulaire de consentement – Évaluation de l'atelier

Titre du projet :

Évaluation d'un événement d'apprentissage en ligne conçu pour stimuler la formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP)

Chercheuse :

Lynn Casimiro pht., M.A.
Candidate au doctorat
Faculté d'éducation - Université d'Ottawa
et
Coordonnatrice de projets
Consortium national de formation en santé (CNFS)
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Ottawa (Ontario)
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Superviseure :

Colla Jean MacDonald Ph. D.
Professeure titulaire
Faculté d'éducation - Université d'Ottawa
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145, rue Jean-Jacques-Lussier
Ottawa (Ontario)
K1N 6N5
Tel. : (613) 562-5800 poste 4110
Télec. : (613) 562-5428
Courriel : cjmacdon@uottawa.ca

Invitation à participer : Je suis invité(e) à participer à la recherche nommée ci-haut qui est menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald. Mme Lynn Casimiro est aussi l'animatrice de mon atelier en ligne intitulé « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail ».



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But de l'étude : Le but de l'étude est d'explorer ce qui semble fonctionner le mieux pour concevoir, produire, animer et évaluer un atelier en ligne au sujet du travail interprofessionnel. Les chercheuses espèrent que cette étude les aidera à identifier les types d'activités d'apprentissage en ligne qui contribuent à augmenter les connaissances, les habiletés et les attitudes à l'égard de la « pratique en collaboration centrée sur le patient (PCCP) » et que les données recueillies serviront de guide pour le développement d'autres ateliers en ligne.

Participation : Ma participation consistera essentiellement à compléter trois questionnaires.

1. Le questionnaire pré-atelier me sera envoyé par courriel et est composé de 13 questions à réponses courtes au sujet de mon niveau d'aisance à utiliser l'ordinateur. Je dois compléter le questionnaire avant le début de l'atelier et cela me prendra environ 20 minutes. Mes réponses seront confidentielles.
2. Le questionnaire mi-atelier sera disponible sur le site Web et est composé de 20 questions à choix de réponses ou à réponses courtes au sujet de la structure, des contenus, de la modalité d'enseignement et du service. Je dois compléter le questionnaire à la troisième semaine de l'atelier et cela me prendra environ 10 minutes à répondre. Mes réponses seront anonymes.
3. Le questionnaire post-atelier sera disponible sur le site Web et est composé de 45 questions à choix de réponses ou à réponses courtes au sujet de la structure, des contenus, de la modalité d'enseignement et du service. Je dois compléter le questionnaire à la fin de l'atelier et cela me prendra environ 45 minutes à répondre. Mes réponses seront anonymes.
4. Les chercheuses pourront utiliser, en conservant mon anonymat, certains messages que j'aurai affichés dans le forum de discussion ou mes données statistiques accumulées sur le site du cours.

Risques : Je comprends que puisque ma participation à cette recherche implique que je partage mes expériences d'apprentissage avec la chercheuse qui est aussi l'animatrice de l'atelier, qu'il est possible que je me sente intimidé(e). J'ai reçu l'assurance des chercheuses que mes réponses aux divers questionnaires sont confidentielles et qu'en plus mes réponses aux questionnaires mi-atelier et post-atelier sont anonymes donc l'animatrice ne saura pas qui a répondu quoi. De plus, je n'ai pas besoin de répondre à toutes les questions et je n'ai pas besoin de compléter le questionnaire si je ne me sens pas à l'aise de continuer, et ce, sans fournir d'explication. Mon choix de participer ou non aux diverses modalités d'évaluation de cette étude n'aura aucun impact sur l'attribution des certificats d'attestation de participation à l'atelier. Ma participation à l'atelier sera évaluée au même titre que les autres participants selon les critères préétablis et affichés sur le site Web.

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Bienfaits : Ma participation à cette recherche guidera l'animation et la structure de mon atelier « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail » et influencera le développement de la structure, du contenu, de la modalité d'enseignement et de l'évaluation des ateliers en ligne futurs au sujet de l'interprofessionalisme.

Confidentialité et anonymat : J'ai l'assurance des chercheuses que l'information que je partagerai avec elles restera strictement confidentielle. Je m'attends à ce que mes réponses ne soient utilisées que pour la modification de l'atelier en ligne « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail » et pour guider le développement d'ateliers en ligne futurs. Ces ateliers seront produits par le Consortium national de formation en santé (CNFS) – volet Université d'Ottawa et seront offerts gratuitement à tous les professionnels de la santé francophones ou francophiles du Canada intéressés à les suivre. Le CNFS est financé par Santé Canada. Je comprends que les chercheurs analyseront toutes les réponses reçues pour en ressortir des thèmes communs (par exemple, durée de l'atelier et contenus suggérés). Ce sont ces thèmes qui seront communiqués ou présentés dans les publications ou communications scientifiques. Mon identité ne sera donc jamais révélée.

Conservation des données : Les courriels et les réponses aux questionnaires en ligne seront sauvegardés sur un disque compact. Le disque compact et les formulaires de consentements seront gardés sous clé dans un classeur dans le local 3021A du Pavillon Roger Guidon pour une période de 5 ans ou moins selon les exigences des maisons d'édition. Seules Mme Lynn Casimiro et sa collègue de travail, Mme Lucie Couturier, coordonnatrice de projet du CNFS et membre de l'équipe de production de l'atelier en ligne ont accès à ce local. Toutes les copies documents imprimées seront déchiquetées immédiatement après leur utilisation.

Participation volontaire : Ma participation à cette recherche est volontaire et je suis libre de me retirer en tout temps ou refuser de répondre à certaines questions, sans subir de conséquences négatives. Je pourrai m'inscrire à n'importe quel atelier offert par le CNFS – volet Université d'Ottawa sans subir de préjudice puisque le processus d'inscription est géré par d'autres personnes que les chercheurs. Si je choisis de me retirer de l'étude, après avoir envoyé mes réponses, les données recueillies jusqu'à ce moment seront effacées de l'ordinateur ou détruites.

Acceptation : Je, _____, accepte de participer à cette recherche menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald de la Faculté d'éducation.

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Pour tout renseignement additionnel concernant cette étude, je peux communiquer avec la chercheure ou son superviseur. Pour tout renseignement sur les aspects éthiques de cette recherche, je peux m'adresser au Responsable de l'éthique en recherche, Université d'Ottawa, Pavillon Tabaret, 550, rue Cumberland, pièce 159, (613) 562-5841 ou ethics@uottawa.ca.

Mme Lynn Casimiro conservera la télécopie de mon formulaire de consentement et je peux garder la copie originale.

Signature du participant : _____ Date : _____

Signature du chercheur : _____ Date : _____

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Appendix K

Formulaire de consentement – Participation

Titre du projet :

Évaluation d'un événement d'apprentissage en ligne conçu pour stimuler la formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP)

Chercheure :

Lynn Casimiro pht., M.A.
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Faculté d'éducation - Université d'Ottawa
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Coordonnatrice de projets
Consortium national de formation en santé (CNFS)
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Superviseure :

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Télec. : (613) 562-5428
Courriel : cjmacdon@uottawa.ca

Invitation à participer : Je suis invité(e) à participer à la recherche nommée ci-haut qui est menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald. Mme Lynn Casimiro est aussi l'animatrice de mon atelier en ligne intitulé « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail ».



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But de l'étude : Le but de l'étude est d'explorer ce qui semble fonctionner le mieux pour concevoir, produire, animer et évaluer un atelier en ligne au sujet du travail interprofessionnel. Les chercheuses espèrent que cette étude les aidera à identifier les types d'activités d'apprentissage en ligne qui contribuent à augmenter les connaissances, les habiletés et les attitudes à l'égard de la « pratique en collaboration centrée sur le patient (PCCP) » et que les données recueillies serviront de guide pour le développement d'autres ateliers en ligne.

Participation : Ma participation consistera essentiellement à répondre à deux questions par courriel. La première question porte sur les barrières à la participation alors que la deuxième question porte sur les facteurs facilitant la participation.

Risques : Je comprends que puisque ma participation à cette recherche implique que je partage mes expériences d'apprentissage avec la chercheuse qui est aussi l'animatrice de l'atelier, qu'il est possible que je me sente intimidé(e). J'ai reçu l'assurance des chercheuses que mes réponses aux deux questions sont confidentielles. De plus, je n'ai pas besoin de répondre à chacune des questions. Mon choix de participer à cette étude n'aura aucun impact sur ma participation future aux autres ateliers offerts par le Consortium nation de formation en santé (CNFS) – volet Université d'Ottawa.

Bienfaits : Ma participation à cette recherche influencera le développement de la structure, du contenu, de la modalité d'enseignement et de l'évaluation des ateliers en ligne futurs au sujet de l'interprofessionalisme.

Confidentialité et anonymat : J'ai l'assurance des chercheuses que l'information que je partagerai avec elles restera strictement confidentielle. Je m'attends à ce que mes réponses ne soient utilisées que pour guider le développement d'ateliers en ligne futurs. Je comprends que les chercheurs analyseront toutes les réponses reçues pour en ressortir des thèmes communs (par exemple, durée de l'atelier et contenus suggérés). Ce sont ces thèmes qui seront communiqués ou présentés dans les publications ou communications scientifiques. Mon identité ne sera donc jamais révélée.

Conservation des données : Les courriels seront sauvegardés sur un disque compact. Le disque compact et les formulaires de consentements seront gardés sous clé dans un classeur dans le local 3021K du Pavillon Roger Guidon (Université d'Ottawa) pour une période de 5 ans ou moins selon les exigences des maisons d'édition. Seule Mme Lynn Casimiro a accès à ce classeur. Toutes les copies de documents imprimés seront déchiquetées immédiatement après leur utilisation.



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Participation volontaire : Ma participation à cette recherche est volontaire et je suis libre de me retirer en tout temps ou refuser de répondre à certaines questions, sans subir de conséquences négatives. Si je choisis de me retirer de l'étude, après avoir envoyé mes réponses, les données recueillies jusqu'à ce moment seront effacées de l'ordinateur ou détruites.

Acceptation : Je, _____, accepte de participer à cette recherche menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald de la Faculté d'éducation.

Pour tout renseignement additionnel concernant cette étude, je peux communiquer avec la chercheuse ou son superviseur. Pour tout renseignement sur les aspects éthiques de cette recherche, je peux m'adresser au Responsable de l'éthique en recherche, Université d'Ottawa, Pavillon Tabaret, 550, rue Cumberland, pièce 159, (613) 562-5841 ou ethics@uottawa.ca.

Mme Lynn Casimiro conservera la télécopie de mon formulaire de consentement et je peux garder la copie originale.

Signature du participant : _____ Date : _____

Signature du chercheur : _____ Date : _____



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Appendix L

Formulaire de consentement – Entrevue

Titre du projet :

Évaluation d'un évènement d'apprentissage en ligne conçu pour stimuler la formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP)

Chercheure :

Lynn Casimiro pht., M.A.
Candidate au doctorat
Faculté d'éducation - Université d'Ottawa
et
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Tel. : (613) 562-5800 poste 4110
Télec. : (613) 562-5428
Courriel : cjmacdon@uottawa.ca

Invitation à participer : Je suis invité(e) à participer à la recherche nommée ci-haut qui est menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald. Mme Lynn Casimiro est aussi l'animatrice de mon atelier en ligne intitulé « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail ».



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But de l'étude : Le but de l'étude est d'explorer ce qui semble fonctionner le mieux pour concevoir, produire, animer et évaluer un atelier en ligne au sujet du travail interprofessionnel. Les chercheuses espèrent que cette étude les aidera à identifier les types d'activités d'apprentissage en ligne qui contribuent à augmenter les connaissances, les habiletés et les attitudes à l'égard de la « pratique en collaboration centrée sur le patient (PCCP) » et que les données recueillies serviront de guide pour le développement d'autres ateliers en ligne.

Participation : Je suis invité(e) à participer à une entrevue téléphonique d'une durée de 45 minutes. Si je décide de participer et si je suis choisi(e), Mme Lynn Casimiro fixera un rendez-vous avec moi selon mon horaire. Mon entrevue téléphonique sera enregistrée sur bande audio et sera transcrite verbatim en format électronique. Je pourrai revoir le verbatim et le modifier si je le désire.

Risques : Je comprends que puisque ma participation à cette recherche implique que je partage mes expériences d'apprentissage avec la chercheuse qui est aussi l'animatrice de l'atelier, qu'il est possible que je me sente intimidé(e). J'ai reçu l'assurance des chercheuses que mes réponses aux diverses questions de l'entrevue sont confidentielles. De plus, je n'ai pas besoin de répondre à toutes les questions sans avoir à fournir d'explications aux chercheuses. Je pourrai aussi choisir de ne pas participer à l'entrevue téléphonique même après avoir fixé un rendez-vous. Il n'y a aucune obligation de ma part. Mon choix de participer ou non à l'entrevue n'aura aucun impact sur l'attribution des certificats d'attestation de participation à l'atelier. Ma participation à l'atelier sera évaluée au même titre que les autres participants selon les critères préétablis et affichés sur le site Web. Aussi, les certificats d'attestation seront envoyés avant même que mon entrevue ait lieu.

Bienfaits : Ma participation à cette recherche guidera l'animation et la structure de mon atelier « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail » et influencera le développement de la structure, du contenu, de la modalité d'enseignement et de l'évaluation des ateliers en ligne futurs au sujet de l'interprofessionalisme.

Confidentialité et anonymat : J'ai l'assurance des chercheuses que l'information que je partagerai avec elles restera strictement confidentielle. Un pseudonyme ou un code sera utilisé pour classer mes données et donc mon nom ou mon endroit de travail ne sera pas rattaché aux données. Je m'attends à ce que mes réponses ne soient utilisées que pour la modification de l'atelier en ligne « Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail » et pour guider le développement d'ateliers en ligne futurs. Ces ateliers seront produits par le Consortium national de formation en santé (CNFS) – volet Université d'Ottawa et seront offerts gratuitement à tous les professionnels de la santé francophones ou francophiles du Canada intéressés à les suivre. Le CNFS est financé par Santé Canada. Je comprends que les chercheurs analyseront toutes les réponses reçues pour en ressortir des thèmes



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communs (par exemple, durée de l'atelier et contenus suggérés). Ce sont ces thèmes qui seront communiqués ou présentés dans les publications ou communications scientifiques. Mon identité ne sera donc jamais révélée.

Conservation des données : Les entrevues téléphoniques seront enregistrées sur bande audio. Les verbatim des bandes audio seront sauvegardés sur un disque compact. Le disque compact et les formulaires de consentements seront gardés sous clés dans un classeur dans le local 3021A du Pavillon Roger Guidon pour une période de 5 ans ou moins selon les exigences des maisons d'éditions. Seules Mme Lynn Casimiro et sa collègue de travail, Mme Lucie Couturier, coordonnatrice de projet du CNFS et membre de l'équipe de production de l'atelier en ligne ont accès à ce local.

Participation volontaire : Ma participation à cette recherche est volontaire et je suis libre de me retirer en tout temps ou refuser de répondre à certaines questions, sans subir de conséquences négatives. Je pourrai m'inscrire à n'importe quel atelier offert par le CNFS – volet Université d'Ottawa sans subir de préjudice puisque le processus d'inscription est géré par d'autres personnes que les chercheuses. Si je choisis de me retirer de l'étude, après avoir envoyé mes réponses, les données recueillies jusqu'à ce moment seront effacées de l'ordinateur ou détruites.

Acceptation : Je, _____, accepte de participer à cette recherche menée par Mme Lynn Casimiro sous la supervision du Dre Colla Jean MacDonald de la Faculté d'éducation.

Pour tout renseignement additionnel concernant cette étude, je peux communiquer avec la chercheuse ou son superviseur.

Pour tout renseignement sur les aspects éthiques de cette recherche, je peux m'adresser au Responsable de l'éthique en recherche, Université d'Ottawa, Pavillon Tabaret, 550, rue Cumberland, pièce 159, (613) 562-5841 ou ethics@uottawa.ca.

Mme Lynn Casimiro conservera la télécopie de mon formulaire de consentement et je peux garder la copie originale.

Signature du participant : _____ Date : _____

Signature du chercheur : _____ Date : _____

Veuillez envoyer votre formulaire au numéro suivant : 613-562-5428, merci!

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Appendix M

Needs analysis			
Summary of findings n= 6 (5 females and 1 male)			
Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?			
Structure	Content	Delivery	Service
All the participants reported working in an interprofessional manner with their team. Yet those who provided an example describe multiprofessional practices. Participants suggested the following as means to improve CPCP in the workplace: • More time. • Improved communication about the patient and between each team member. • Better definition of roles. • Discussion about their scope of practice. • Improved work relationships • Common training highlighting interprofessional success stories. Participants stated that lack of time, staff shortages and professional boundaries were obstacles to interprofessional collaboration. With regard to designing the workshop, the participants proposed the following elements: • Plan a short workshop (6 to 8 weeks) with short block of information. • Present multiple professions and healthcare settings. • Use personal accounts and concrete examples.	All the participants felt their healthcare team knew what interprofessional practices were but some felt that they weren't necessarily applied. None were really familiar with the Health Canada terms CPCP or IECPCP. Participants felt that information about professional roles and better communication techniques would improve team functioning. Participants felt the following concepts should be included in the workshop: • Team education and evaluation methods • Different collaborative approaches • Developing a culture of collaboration • Best practices One participant advised avoiding content that required in-depth analysis.	One participant felt there was no real contact in online workshops. The others felt eLearning was an appropriate approach to teach interprofessional practices. Participants asked for video presentations, discussion forums, documents on the subject they can share with others, questionnaires and exercises that help deepen their understanding about the subject matter. Two participants also wanted the workshop to encourage teams to participate. Two participants stated they would access the online workshop from home, one from work and three from home and work. Participants seemed to think 30 to 90 minutes was an acceptable range of time to spend online at each visit. One participant said she preferred half or full days at a time but less often. Participants felt that the facilitator's role should be one of expert or resource person able to act as a mediator and a guide to encourage, motivate, guide and comment participation.	Two participants wanted clear instructions, including instructions on the use of the forum and chat while another requested online and telephone support. Participants recommended that the following realities be considered when designing the workshop: • Many healthcare workers are overwhelmed (e.g., difficult work situations such as traveling and distance, lack of resources). • Healthcare workers don't have time for lengthy workshops. • Access to the eLearning site must be flexible. • Applicable to all types of healthcare settings. • Participants will have differing work schedules.
Outcomes			
Participants wanted to learn about success stories and how they could apply CPCP in their workplace. They also wanted to learn how to stimulate and motivate change.			

Appendix N: Workshop content

Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail

- Descriptif du cours :** Ce cours s'adresse aux professionnels de la santé engagés dans la formation clinique ou académique des étudiants et des collègues de travail, ainsi qu'aux administrateurs, aux chefs d'équipe ou tout autre professionnel intéressé à stimuler le travail interprofessionnel dans son milieu. Par le biais d'activités interactives, de partages d'expériences et de discussions ciblées sur divers thèmes de l'interprofessionalisme, les apprenants seront amenés à créer un plan individualisé d'application ou d'enseignement interprofessionnel, qui tiendra compte des écrits récents à ce sujet.
- Objectif général :** Concevoir une carte conceptuelle illustrant les stratégies de la formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP), lesquelles s'appliquent au contexte de travail spécifique de chaque apprenant.
- Thèmes ciblés :** Durant ce cours les apprenants exploreront les thèmes suivants :
- Conception de stratégies d'apprentissage qui amènent les apprenants à apprécier les rôles et responsabilités des membres d'une équipe de soins
 - Discours et tensions actuels au sujet de la terminologie et des définitions du travail en collaboration
 - Champs d'intervention et de recherche de la FIPCCP
 - Modèles de référence identitaire pour stimuler la FIPCCP
 - Compétences de la FIPCCP à atteindre
 - Outils d'évaluation de la FIPCCP
 - Interventions planifiées et appliquées de la FIPCCP
- Clientèle visée :** Le participant sera un professionnel de la santé avec de l'expérience clinique ou en enseignement dans son domaine. Par ailleurs, je juge que pour tirer profit de ce cours, le participant doit avoir un intérêt particulier à l'égard du travail interprofessionnel et juger son intégration importante au travail d'équipe efficace et à la prestation des soins de qualité.
- Au niveau de la conception de ce cours, je crois que pour enseigner selon les principes de la FIPCCP, il est d'abord nécessaire de stimuler un travail de réflexion individuelle chez l'apprenant. Ce travail cognitif doit ensuite être revisité dans un contexte social, c'est-à-dire entre l'apprenant et ses collègues, où il lui sera possible de discuter, lire, paraphraser et défendre ses idées en utilisant une communication efficace. Ce cours est conçu pour offrir un environnement d'apprentissage propice à la réflexion, à la structuration et à la collaboration. Toutefois, il est entendu que l'apprentissage au sujet de la FIPCCP pourra se poursuivre à tous moments que ce soit à l'intérieur ou à l'extérieur de l'environnement formel d'apprentissage.
- Consignes à l'intention des participants :**
- Attentes :** Ce cours est d'une durée de 6 semaines. J'estime que les activités d'apprentissage prévues sur le site WebCt nécessiteront un total de 20 heures de travail. Toutefois, une période de temps moindre ou supplémentaire peut s'avérer nécessaire selon les besoins personnels de chaque apprenant. Pour tirer profit des activités prévues, il est essentiel de participer activement aux discussions virtuelles en lisant les messages déposés, en essayant de répondre aux questions et en avançant des arguments qui s'appuient sur les idées et les énoncés des collègues de classe.

Stratégies d'enseignement : Pour vous aider à maîtriser la matière enseignée et à l'appliquer dans votre contexte de travail, l'environnement de classe WebCt comportera des activités animées et interactives. Il y aura des textes, des forums de discussion, des débats, des histoires de cas et des modèles. Vous aurez à concevoir, partager et commenter les documents de travail et les cartes conceptuelles produits dans ce cours. L'interaction, le partage et la discussion avec la formatrice et avec les autres participants stimuleront le processus d'apprentissage.

Évaluation : Cet atelier de formation s'appuie sur les principes de l'évaluation formative. La formatrice de l'atelier vous fournira une rétroaction sur vos apprentissages tout au long de l'atelier donc aucune note ne vous sera attribuée. Vous êtes invités à compléter la réflexion pré et post atelier pour vous aider à faire le bilan de vos connaissances. Un certificat d'attestation sera envoyé à tous les apprenants ayant complété 80 % des activités d'apprentissage, ce qui inclut les forums de discussion.

Contenu du cours

Les rôles et responsabilités

Les étudiants en santé débutent leur formation avec un certain nombre d'idées pré-conçues au sujet de leur profession. Les étudiants bâtissent sur ces suppositions lors de leurs interactions avec les collègues de classe, les professeurs et les superviseurs cliniques. La conception des rôles et responsabilités associée à la profession se précise et évolue au cours des années de formation (Cook, Gilmer, & Bess, 2003; Fagerberg & Kihlgren, 2001). Dans le domaine de l'ergothérapie, Hughes (2001) explique que la transition dans le milieu de travail exige une redéfinition des rôles et responsabilités de travail en relation avec les autres professions. Cette différenciation des autres par le biais des rôles et responsabilités est un phénomène documenté chez toutes les professions de la santé et sert à établir les frontières professionnelles (Hughes, 2001; Horsburgh, Lamdin & Williamson, 2001; Law, Meijers, & Wijers, 2002). La transition d'un milieu à un autre (académique vers clinique, hospitalier vers communautaire, aigu vers chronique) ou d'une équipe de soins à une autre (orthopédie vers santé mentale) représente une période de remise en question par le professionnel de la santé qui doit revoir ses frontières professionnelles. Or, bien que le professionnel peut avoir une conception claire de ses rôles et responsabilités, il n'en est pas de même pour les rôles et responsabilités des autres professionnels avec qui il travaille. Pour stimuler le travail interprofessionnel, il est essentiel de comparer ses rôles et responsabilités avec ceux de ses collègues tels qu'ils les perçoivent et d'ajuster sa propre conception au besoin.

L'interprofessionalisme

Le concept du travail d'équipe ou de la pratique en collaboration n'est pas nouveau. La pratique en collaboration a fait son apparition après la seconde Guerre mondiale lorsque les manufacturiers de voitures japonaises ont changé de moyen de gestion en passant du concept de production en masse de Ford à la production allégée (Coopman, 2001; Sierchio, 2003). Les particularités de la production allégée sont le travail d'équipe, la communication et l'utilisation efficace des ressources. En appliquant cette nouvelle approche, les Japonais ont réussi à réduire le nombre d'unités défectueuses de 33 %, à utiliser la moitié de l'espace de fabrication en usine et à produire le même nombre d'unités en utilisant la moitié des heures de travail. Le concept japonais de la production allégée s'est généralisé au-delà de l'industrie de l'automobile et a eu un impact majeur sur l'industrie nord-américaine.

Les modèles de gestion conceptualisés à partir des approches collaboratives sont devenus populaires dans le monde des affaires et ont même envahi d'autres milieux de travail. Le secteur des soins de santé a commencé à appliquer les concepts et les principes de la pratique en collaboration en 1973, au même moment où l'Organisation mondiale de la santé (OMS) initiait un mouvement vers l'enseignement interprofessionnel, dans le but d'améliorer les pratiques collaboratives en soins de santé (Barr, 2002). Les dix dernières années ont souligné l'importance du travail d'équipe dans plusieurs rapports et documents politiques sur la gestion des soins (Poulton & West, 1999). La recommandation de développer des approches collaborative dans le système de soins a été catalysée en partie par la redistribution des soins de santé vers le milieu communautaire, la pénurie de main-d'œuvre, en particulier dans les communautés rurales, les pressions socioéconomiques pour améliorer l'efficacité des soins et l'augmentation de la complexité et de la chronicité des cas cliniques. Trouver des façons pour soutenir le travail de collaboration entre les

professionnels de la santé est considéré essentiel pour coordonner les soins (Hall & Weaver, 2001). On peut améliorer l'accès aux soins de santé dans les régions en pénurie de services grâce aux partenariats entre les professionnels, lesquels créent un réseau de soutien et de partage de connaissances et des habiletés. Dans les situations où un professionnel de la santé n'est pas en mesure de fournir tous les soins et les services requis, la collaboration entre les professionnels est recommandée pour atteindre une perspective holistique des cas complexes.

Une multitude de données de recherche valorisent le travail en collaboration pour la prestation des soins. Des auteurs affirment que les équipes en soins de santé qui travaillent bien ensemble peuvent améliorer la qualité des soins de santé, et même, réduire les coûts de santé (Headrick, Wilcock, & Batalden, 1998). Des études ont démontré une amélioration dans la gestion des équipes de soins et dans les soins prodigués aux patients de la pédiatrie à la gériatrie, tant au niveau de soins primaires que communautaires. Au niveau de la gestion des équipes de soins, les données suggèrent une amélioration de l'efficacité des coûts et de la coordination des soins. Par exemple, un sondage fait auprès d'une équipe d'intervention communautaire en pédiatrie qui adhérerait aux principes du travail collaboratif a confirmé qu'il s'agissait d'une équipe organisée qui répondait aux besoins exprimés par les parents et les enfants. Un autre résultat important du travail collaboratif entre les membres de l'équipe de soins est la réduction du pourcentage du personnel qui quitte leur emploi et une augmentation de la satisfaction générale des employés dans les milieux de soins reconnus comme étant exigeants, tels les services de santé mentale (Stichler, 1998).

Du côté des patients, il semble y avoir plusieurs effets positifs du travail collaboratif. Par exemple, le nombre d'erreurs rapportées par une unité de dialyse avait diminué (Sierchio, 2003). Le nombre d'hospitalisations répétées chez la population de patients plus âgés souffrant d'insuffisance cardiaque chronique avait diminué (Pugh et al., 1999). L'état fonctionnel chez les patients gériatriques avait été maintenu par un projet en santé communautaire de type collaboratif. Le séjour à l'hôpital pour un large éventail de la clientèle avait été réduit (Johnson & Yanko, 2001; Zwarenstein & Bryant, 2003). Le taux de mortalité et de morbidité chez les patients en soins palliatifs avait été réduit (Warren, Houston, & Luquire, 1998). En raison de ces résultats de recherche, plusieurs s'entendent pour affirmer que le travail d'équipe est un préalable à la communication optimale entre les professionnels des soins de santé et qu'il améliore la gestion et l'efficacité des soins aux patients (Atwal & Caldwell, 2002; Felten, Cady, Metzler, & Burton, 1997; McNair, Brown, Stone, & Slims, 2001).

Cependant, plusieurs chercheurs remettent en question la justesse des données recueillies sur les bénéfices d'une approche collaborative (Barr, 2002; Health Canada, 2004; Zwarenstein & Bryant, 2003). En effet, les études publiées sur l'efficacité du travail d'équipe fournissent des définitions inadéquates de la pratique collaborative et ainsi s'appuient sur des modèles de soins différents. Ceci entraîne des résultats conflictuels ou des résultats qui sont difficilement comparables (Barr, Freeth, Hammick, Koppel, & Reeves, 2000; Barr, Hammick, Koppel, & Reeves, 1999).

La collaboration et la coopération

Bien qu'il existe plusieurs définitions du concept de la collaboration, on y retrouve un fil conducteur. Les définitions parlent de la coordination des expertises entre les professionnels de la santé, le client et les autres parties impliqués tels les responsables de programmes communautaires et les groupes de soutien pour la prestation des soins (Hayward, DeMarco, & Lynch, 2000; Marett, Gibbons, Memmott, Bott, & Dukes, 1998; Stewart, 2001). Way, Jones et Busing (2000) définissent la collaboration comme « un processus interprofessionnel de communication et de prise de décision qui permet aux connaissances et aux aptitudes individuelles et collectives des pourvoyeurs de soins de santé d'influencer de façon synergique les soins prodigués au patient ou client... »(p. 3). La collaboration requiert, de prime abord, une réflexion personnelle sur un problème. Le résultat de ce processus cognitif est ensuite partagé avec le groupe (Henri & Lundgren-Cayrol, 2001). La collaboration est donc un processus social qui nécessite une interaction entre des individus par le biais de discussions, d'argumentations et de négociations pour construire un plan d'action personnel et commun qui représente les points de vue et l'expertise de chaque membre du groupe. Les mots collaboration et coopération sont souvent utilisés de façon interchangeable dans les écrits. Henri & Lundgren-Cayrol (2001) expliquent que la collaboration implique une relation interdépendante pour soutenir et atteindre les objectifs personnels et collectifs. La coopération, quant à elle, s'appuie sur la division des tâches pour atteindre les objectifs du groupe et l'interaction n'a lieu que lorsqu'il y a mise en commun des résultats. La différence entre la collaboration et la coopération est liée au processus plutôt qu'au résultat (voir Unité 2_Collaboration-coopération.doc).

Les approches; multiprofessionnelle, interprofessionnelle et transprofessionnelle

On utilise plusieurs mots pour décrire l'application du concept de la collaboration en milieu clinique, entres autre, le travail d'équipe, la pratique en parallèle, la coordination des soins, les soins partagés, la pratique multi, inter et trans disciplinaire et multi, inter et trans professionnelle. Ces mots reflètent souvent un choix arbitraire des auteurs ou des établissements de soins qui les utilisent, alors que certains auteurs proposent une distinction entre les suffixes multi, inter et trans (Ivey, Brown, Teske, & Silverman, 1988) (voir Unité 2_Continuum de collaboration.doc)

C'est la définition du mot qui lui donne son sens plutôt que le choix du mot lui-même. En réponse à cette problématique, Santé Canada (2004) a choisi le terme pratique en collaboration centrée sur le patient (PCCP) pour guider la recherche, le développement et la pratique au niveau du travail d'équipe dans les milieux de soins de santé. La PCCP « ...est conçue pour promouvoir la participation active de chaque discipline aux soins prodigués aux patients. Elle met en valeur les objectifs et valeurs centrés sur les patients et la famille, fournit des mécanismes de communication continue entre les fournisseurs de soins, optimise la participation du personnel à la prise de décisions cliniques au sein des disciplines et entre elles, et encourage le respect des contributions spécifiques de chaque professionnel.... » (Santé Canada, 2004). La PCCP adhère aux principes de l'interprofessionnalisme et il s'agit d'un essai pour harmoniser les pratiques en collaboration, le mode de communication et la collecte de données sur l'efficacité de cette approche.

Bien qu'en général, l'ensemble des professionnels de la santé appuient la PCCP, son application peut être problématique. Way, Jones, et Busing (2000) rapportent que bien que les médecins appuient la PCCP, ils sont inquiets face à l'impact des soins partagés et face à la problématique de la responsabilité professionnelle. Ils remettent en question la pertinence d'une définition fixe et unifiée de la pratique en collaboration. Reeves, Freeth, McCrorie, & Perry (2002) mentionnent que : « À bien des égards, la pratique en collaboration demeure problématique avec l'émergence continue de difficultés au niveau de la coordination et de la communication interprofessionnelle » (p. 337). D'autres auteurs ont également noté que les professionnels de la santé ont une connaissance et une compréhension limitées des responsabilités des autres professions, de leur jargons respectifs et que le manque de communication en général et le manque de clarification des différents rôles sont d'autres barrières à une pratique en collaboration efficace (Felten et al., 1997). Stichler (1998) explique : « Les hôpitaux sont quelquefois des milieux peu hospitaliers où travailler. Des conflits entre les collègues de travail, des frustrations, des différences d'opinions à propos des soins aux patients, des jeux de pouvoir, des modes de rémunérations différents qui alimentent des suspicions face aux motifs d'intervention, des barrières professionnelles, des inégalités subjectives des statuts professionnels et d'autres distractions peuvent entraver... les raisons pour être dans un milieu de soins [c'est-à-dire] pour prodiguer des soins. » (p. 53). Bien qu'il y ait des perspectives différentes sur l'efficacité du PCCP, Patel, Cytryn, Shortliffe, & Safran (2000) notent que « les écrits sur les soins de la santé débordent d'exemples d'équipes multidisciplinaires [et interdisciplinaires] efficaces et vantent ce genre de livraison de service dans plusieurs domaines de la santé. » (p. 118)

Le contexte de la PCCP

Dans les trois dernières décennies, la collaboration est une préoccupation bien documentée dans le domaine de la santé (Stark, Skidmore, Wayne, & Stronach, 2002). L'Organisation mondiale de la santé (OMS) a commandité une série de rapports sur le besoin de la collaboration en santé, notamment un rapport technique clé intitulé « La santé pour tous en l'an 2000 » (1988). Le but de ce rapport était d'examiner des stratégies internationales pour améliorer l'accès à des services de la santé de qualité. Une collaboration accrue entre les professionnels de la santé a été un des points saillants de ce rapport. Depuis, les rapports de l'OMS continuent à mettre en valeur l'importance d'améliorer le travail de collaboration pour atteindre un accès universel à des services de santé de qualité (voir WHO, 2000; 2001a; 2001b).

En parallèle aux activités de l'OMS, plusieurs pays ont écrit des rapports pour identifier des méthodes efficaces et efficientes d'offrir des soins de qualité en tenant compte des besoins spécifiques à leur nation. Le Département de santé du Royaume-Uni a recommandé des stratégies éducationnelles et de fonctionnement au travail pour améliorer la coordination des soins et les habiletés de collaboration à l'intention des étudiants et des professionnels de la santé sur le marché du travail (Department of Health, 2000). Un groupe de chercheurs du Royaume-Uni a fondé le *Centre for the Advancement of Interprofessional Education (CAIPE)*, une organisation de réputation internationale, pour participer au développement des politiques gouvernementales, mener des programmes de recherche et disséminer les informations importantes (<http://www.caipe.org.uk>). Aux États-Unis, le Pew Health Commission a produit une série de rapports qui a ressorti 21 compétences pour guider la réforme des programmes d'éducation en santé du pays. Une des recommandations clés était de cibler l'amélioration des habiletés

de communication des étudiants pour qu'ils puissent mieux collaborer entre eux, avec les autres professionnels de la santé et les divers représentants des services de santé, lorsqu'ils intègrent le marché du travail (Finocchio, Dower, McMahon, Gragnola, & The Task Force on Health Care Workforce Regulation, 1995). Depuis les rapports Pew, les études financées par le gouvernement américain continuent à mettre l'accent sur le besoin d'améliorer la collaboration entre les professionnels de la santé et de modifier le système d'éducation en conséquence (Shortell, 2000). Au Canada, le rapport Romanow (2002) a recommandé une augmentation du soutien financier et de la coordination des soins en santé communautaire. L'accent a été mis sur l'importance de la collaboration entre les prestataires de services et les professionnels de la santé pour atteindre des meilleurs résultats de santé et une meilleure collaboration des soins. L'Accord des premiers ministres de 2003 a été un point tournant pour attirer l'attention nationale sur le travail en collaboration entre les professionnels de la santé (Santé Canada, 2003). L'Accord souligne des changements fondamentaux au système de la santé canadien pour offrir des soins de santé efficaces et améliorer la continuité et la coordination des soins. L'Accord avance que les professionnels de la santé doivent être éduqués différemment. Par la suite, un projet sur le travail interprofessionnel a été mis sur pied par Ressources humaines Canada, en collaboration avec Santé Canada, pour financer des études et des programmes de recherche nationaux (Santé Canada, 2004). Un groupe d'experts travaillant pour Santé Canada a recommandé l'adoption du terme « pratique en collaboration centrée sur le patient (PCCP) » pour désigner le travail interprofessionnel et a mis en valeur l'importance de se pencher sur la formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP) comme moyen de promouvoir la PCCP. Pour opérationnaliser le terme FIPCCP, Santé Canada a choisi de reprendre la définition du Centre for the Advancement of Interprofessional Education (CAIPE). Selon cette définition, la FIPCCP correspond à des « ...occasions où deux professionnels ou plus apprennent les uns des autres pour améliorer la collaboration et la qualité des soins. » CAIPE 1997.

Les rapports et les projets de l'OMS, des Royaume-Uni, des États-Unis et du Canada ne sont que des exemples du soutien croissant pour l'amélioration de la collaboration entre les professionnels de la santé. Toutefois, certains chercheurs croient que le changement de paradigme qui a conduit à l'adoption des pratiques en collaboration a été lent et lourd en grande partie parce que le système d'éducation dans le domaine de la santé a échoué dans son évolution pour répondre aux besoins des milieux de travail en matière de PCCP (Ivey, Brown, Teske, & Silverman, 1988).

Le modèle de la FIPCCP de Santé Canada

Plusieurs chercheurs ont développé des modèles, des structures et des grandes lignes décrivant une pratique en collaboration efficace. (Areskog, 1994; Gitlin, Lyons, & Kolodner 1994; Hayward, DeMarco, & Lynch, 2000; Johnson & Yanko, 2001). Ils ont ressorti des déterminants, des préalables, des critères et des éléments nécessaires pour soutenir le développement et l'amélioration subséquente de la PCCP. À titre d'exemple, le modèle de collaboration en cinq étapes de Gitlin et al. décrit le processus vécu par les équipes de chercheurs et de formateurs qui travaillent en collaboration. Le modèle inclut l'échange (communication), la négociation, la création d'un environnement favorisant la confiance et la différenciation des rôles. Le modèle est constitué de cinq étapes qui se chevauchent : Étape I – évaluation et création de but, Étape II – détermination d'un mode de collaboration fonctionnelle, Étape III – identification des ressources et réflexion, Étape IV – révision et amélioration du projet et implantation, Étape V – évaluation.

Le modèle Alliance de DeMarco & Horowitz (2000) requiert trois conditions : Le partage d'une valeur éthique sur la notion de « soins » entre les différentes professions; des connaissances personnelles qui suite à une réflexion mutuelle intègrent le « savoir » de la pratique et de la formation; et du soutien social comme une forme de relations interprofessionnelles. Le modèle de l'alliance interprofessionnelle d'Hayward, DeMarco, & Lynch's (2000) fait une synthèse du modèle de collaboration en cinq étapes de Gitlin, Lyons, & Kolodner's (1994) et du modèle Alliance de DeMarco & Horowitz's (2000). Le modèle de l'alliance interprofessionnelle décrit les étapes et les relations qui sont établies durant la collaboration interprofessionnelle et illustre qu'une collaboration qui réussit est directement reliée aux soins à prodiguer, au savoir personnel et au degré du soutien social présent dans la relation d'aide. Les sept étapes incluent : l'évaluation des besoins individuels; la comparaison des besoins de l'individu avec ceux du groupe; l'établissement du début des relations; une étude sérieuse et une réflexion; une entente à collaborer; une projection de l'implantation; l'évaluation et une réflexion sur les processus de collaboration et ses résultats (Hayward et al., 2000). En 2004, Santé Canada a adopté le modèle proposé par D'amour et Oandasan (2004) pour guider les travaux nationaux sur le FIPCCP.

L'identité professionnelle et la PCCP

Les programmes de formation pré diplôme visent en ce moment l'intégration des connaissances, des attitudes et des habiletés liées à l'ensemble des rôles inhérents à la conception sociale du travail, qu'on appelle le « concept populaire ». Il y a un processus conjoint par lequel nous examinons les expériences vécues et nous prenons des notes mentales sur les différences et les similarités pour se créer une représentation interne de la profession choisie qu'on appelle le « construit personnel ». Law, Meijers et Wijers (2002) soutiennent que les adultes développent leur identité professionnelle en comparant continuellement les concepts populaires et les construits personnels tout au long de leur formation et de leur carrière. L'identité professionnelle peut donc être définie comme « ...un cadre de référence [flexible] pour jouer les différents rôles liés au travail, prendre des décisions significatives et se développer en tant que professionnel » (Brott & Myers 1999/2002, p. 146). Dans une situation de PCCP, les membres de l'équipe doivent créer un sens commun de direction et il doit y avoir un mouvement de l'identité professionnelle individuelle vers une identité professionnelle de groupe (Nesting & Williams, 1996).

La PCCP pose un défi à l'identité professionnelle de la personne puisque les rôles, tâches ou activités journalières peuvent être appelés à changer ou à être à partager avec d'autres professionnels de la santé. Travailler en collaboration peut rendre difficile la tâche de différencier clairement les frontières d'une profession par rapport à une autre à mesure que les membres de l'équipe travaillent vers une identité de groupe (Rogers, 2001). Ceci change soudainement le concept populaire de la profession et force la personne à changer son construit personnel, ce qui provoque la résistance à la PCCP. Les éducateurs peuvent jouer un rôle important en stimulant la PCCP et en offrant une alternative à la conception populaire dans un contexte formel. Les éducateurs peuvent offrir un cadre de référence identitaire qui présente un exemple du savoir-faire et du savoir être dans un contexte de PCCP. Les éducateurs ont un rôle clé dans l'émergence et le modelage de l'identité professionnelle en influençant les croyances et les attitudes des apprenants envers la PCCP (D'Amour & Oandasan, 2004).

Les éléments facilitateurs et les obstacles à la FIPCCP

Intégrer les stratégies de la PCCP nécessite un changement du modèle de soins. Les écrits sur le changement organisationnel démontre que des modifications au mode habituel de fonctionnement, dans ce cas-ci par des apprenants pré et post diplômés, des administrateurs et des éducateurs, rencontre habituellement de la résistance (Steinert, 2004). Le soutien politique et financier du gouvernement fédéral stimule le changement vers la PCCP au Canada. Toutefois, les stratégies d'implantation ont besoin d'atteindre les milieux cliniques et les milieux d'enseignement. Malheureusement, les pratiques exemplaires en matière de PCCP n'ont pas encore été établies puisqu'il n'y a pas encore assez d'études dans ce domaine. La PCCP en santé commence tout juste à se tailler une place et plutôt, dans le contexte académique (c.-à-d. subvention de recherche spécifique à la PCCP, conférences, etc...) (Santé Canada, 2004). Il faut viser vers un changement de culture et cela n'est pas une mince affaire.

Les auteurs avancent qu'il doit y avoir des changements dans les attitudes, les croyances, les stratégies et les politiques aux plans individuel, professionnel et organisationnel pour s'assurer une application et une adhésion à long terme à la PCCP (Barr, 2002; Gardner, Chamberlin, Heestand, & Stowe 2002; Lamorey, & Ryan, 1998). Ceci implique la création de nouveaux programmes d'éducation visant les professionnels de la santé en formation, l'adaptation des programmes d'études existants et modifier les critères des divers processus d'agrément. L'envergure de ces changements exige l'engagement de tous les groupes impliqués en santé (gouvernementaux, éducationnels, soins aux bénéficiaires, etc.) pour déployer des efforts soutenus, et ce, pour une période de temps prolongée. Ces changements demandent aussi de la flexibilité dans son application et le respect des cultures organisationnelles.

Parsell and Bligh (1999) proposent quatre catégories de facilitateurs et d'obstacles à la PCCP. Premièrement, il y a des barrières structurelles à considérer telles que l'accès à de la formation ponctuelle et le fardeau financier qui accompagne un changement à grande échelle. Deuxièmement, reconnaître les attitudes face à la collaboration et stimuler un changement vers la PCCP. Par exemple, il faut qu'il y ait un désir de changement vers la PCCP de toutes les personnes, groupes ou organismes impliqués. Troisièmement, le design et l'organisation des programmes d'études et les approches pédagogiques doivent promouvoir la collaboration; c'est un élément clé du passage à la PCCP. Le quatrième point est lié aux frontières professionnelles, c'est-à-dire les rôles et les responsabilités associés à une profession. Le manque de compréhension des autres professions et des frontières associées est à la base de la résistance à la PCCP et doit être exploré d'une manière spécifique. Les éducateurs ont besoin de reconnaître les éléments facilitateurs et les obstacles à la collaboration pour atteindre l'implantation de la PCCP.

Les compétences clés de la collaboration

Que doit-on inclure dans une stratégie de formation à la FIPCCP? En ce qui concerne le contenu, il est important d'examiner comment la collaboration se développe et est consolidée dans les équipes de soins de santé afin de développer des programmes éducationnels appropriés. San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla ont investigué les déterminants du PCCP (2005). Suite à une recension d'écrits empiriques et théoriques, ils ont identifié quatre déterminants interactionnels : désir de collaborer, confiance, communication et respect. En réponse aux déterminants dans un contexte éducationnel, D'Eon (2005) suggère que la FIPCCP doit cibler les trois domaines d'apprentissage soulignés par Bloom (1956). Il s'agit des domaines cognitif, psychomoteur et affectif, auxquels D'Eon suggère d'ajouter un quatrième domaine, soit le social ou relationnel, pour inclure « les interactions en groupes » (p. 50). Barr (1998) décrit les compétences de la FIPCCP qui entérinent les quatre domaines d'apprentissage et ces compétences clés sont, selon Curran (2004) et Oandasan et al (2004), nécessaires pour assurer une transition réussie à la PCCP dans les milieux de soins :

- 1- Expliquer aux autres professions les rôles et les responsabilités de chacune des professions.
- 2- Reconnaître et observer les contraintes de chacun des rôles et des responsabilités.
- 3- Reconnaître et respecter les rôles, les responsabilités et les compétences des autres professions qui sont en relation avec celles de sa profession.
- 4- Travailler avec les autres professions pour participer au changement et résoudre les conflits dans la prestation des soins et des traitements.
- 5- Travailler avec les autres pour évaluer, planifier, fournir et réévaluer les soins pour chacun des patients.
- 6- Tolérer les différences, les malentendus et les limites chez les autres professions.
- 7- Faciliter les conférences de cas et les rencontres d'équipes interprofessionnelles
- 8- S'engager dans les relations interdépendantes avec les autres professions (résumer par Curran, 2004, p. 8).

La recherche sur l'organisation d'événements d'apprentissage propose plusieurs stratégies. L'apprentissage en petit groupe est à privilégier en utilisant entre autres, des stratégies d'enseignement expérientielles, l'apprentissage par cas ou l'apprentissage par problème. Dans de telles situations, les auteurs suggèrent d'inclure 8 à 10 apprenants tout au plus, représentant 4 disciplines dans chaque groupe de discussion (Fallsberg & Hammar, 2000; Russell & Hymans, 1999). Les activités d'apprentissage devraient présenter des expériences d'apprentissage significatives, favoriser le développement de l'individu et de l'équipe aussi bien que faciliter la communication, la résolution de problème et les stratégies de résolution de conflits (Kopfstein, 1998; Oandasan & Reeves). L'événement d'apprentissage doit aussi aider les apprenants à développer leurs aptitudes pour le travail d'équipe, la créativité et l'auto apprentissage (Cook, 2004; Curran 2004b; D'Eon, 2004; Parsell & Bligh, 1999).

L'évaluation de la FIPCCP

Évaluer le rendement des étudiants peut être fait en utilisant un outil de mesure. Les écrits recommandent d'utiliser le journal de bord, les profils communautaires, les présentations de cas, les rapports, les travaux, les examens cliniques objectifs standardisés en groupe (ÉCOS – groupe), les examens écrits, les exercices d'auto-évaluation (Handron, Diamond, & Zlotnik, 2001; Jiffry, 2002). D'une part, l'évaluation de l'effet d'un programme d'éducation interprofessionnel peut utiliser une mesure telle que l'échelle de réceptivité à l'apprentissage interprofessionnel (ÉRAI) (Horsburgh, Lambdin, & Williamson, 2001; Parsel & Bligh, 1999) ou « l'Interdisciplinary perception scale » (Slack, Coyle, & Draugalis, 2001). D'autre part, le travail d'équipe en milieu clinique peut être évalué avec un outil tel que le Profil de l'évaluation de l'équipe (PÉE).

Webographie :

Lien au site web de la FIPCCP de Santé Canada

http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/interprof/index_f.html

Sommaire exécutif

Formation interprofessionnelle pour une pratique en collaboration centrée sur le patient : un cadre conceptuel évolutif

http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/interprof/summ-somm_f.html

La Formation interprofessionnelle pour une pratique en collaboration centrée sur le patient

Document de synthèse de recherche

http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/interprof/synth_f.html

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Appendix O: Workshop design

Plan de la formation

Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail

Descriptif du cours : Ce cours cible les professionnels de la santé impliqués dans la formation clinique ou académique des étudiants et des collègues de travail, ainsi que les administrateurs, les chefs d'équipes ou tout autre professionnel intéressé à stimuler le travail interprofessionnel dans son milieu. Par le biais d'activités interactives, de partage d'expériences et de discussions ciblées, les apprenants seront amenés à créer un plan individualisé d'application ou d'enseignement interprofessionnel, qui tiendra compte des écrits récents à ce sujet.

Objectif général : Concevoir une carte conceptuelle illustrant les stratégies de la formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP), qui s'appliquent au contexte de travail spécifique de chaque apprenant.

Semaine 1

Activités préparatoires 1 :

- 1.1 Mot de bienvenue (Page HTML)
- 1.2 Ordinateur est-il prêt? Page HTML, lien au campus virtuel)
- 1.3 Rencontrez les coordonnatrices (Animation)

Activités préparatoires 2 :

- 2.1 Réflexion pré-atelier
Quiz (Act. préparatoire 2 _ Réflexion pré-post atelier_interprofessionalisme.doc)
- 2.2 Capsule vidéo d'introduction
- 2.3 Explication de la carte conceptuelle
 - Explique ce que c'est et à quoi ça sert. (PDF)
(Act. préparatoire 3_Carte conceptuelle.doc)
 - Initiation à la construction d'une carte conceptuelle – (animation+narration)
(Act. préparatoire 3_Exemple carte conceptuelle.ppt)
- 2.4 Débuter la carte conceptuelle
 - Présentation d'une carte conceptuelle simple (l'histoire des trois petits cochons) qui sera utilisée dans toutes les unités du cours. (HTML + image)
 - Lien entre le travail demandé dans ce cours avec l'analogie de l'histoire : « racontez-nous votre histoire pour l'implantation de l'interprofessionalité dans votre milieu de travail : Comment voulez-vous que votre histoire se termine? Quels sont vos personnages? Quel est l'environnement? Quels sont les liens? Où pouvez-vous intervenir? Voilà l'objectif terminal de cet atelier...Faire un schéma de votre histoire c'est-à-dire concevoir votre carte conceptuelle. »
 - Identification du but avec l'histoire des 3 petits cochons (animation)
 - Identification de leur but personnel « Pourquoi participez-vous à ce cours. » (Forum de discussion)

Unité 1

Objectif 1 : *Faire l'expérience d'une stratégie pour apprécier les rôles et les responsabilités de chacun*

1 - Page HTML

2 - Capsule vidéo : Histoire de cas - demande au participant de visionner le cas et de proposer une intervention. Ensuite il doit prévoir l'impact que leur intervention aura sur le rôle ou les tâches de tous les autres professionnels impliqués, la famille et le patient.

Objectif 2 : *Discuter des stratégies pour aider les étudiants ou les collègues à apprécier les rôles et responsabilités de chacun*

- 1 - Page HTML et document PDF
- 2 - Forum de discussion

Objectif 3 : *Élaborer un champ sémantique (liste d'idées et d'images) pour sa carte conceptuelle*

- 1 - Identification du champ sémantique avec l'histoire du petit cochon (Animation interactive)
- 2 - Identification du champ sémantique avec leur propre carte conceptuelle (Forum de discussion)

Semaine 2

Unité 2

Objectif 1 : *Apprécier le mouvement vers l'interprofessionnalisme*

- 1 - Page HTML et document PDF
- 2 - Animation des points clés avec narration

Objectif 2 : *Distinguer entre la définition de collaboration et coopération*

- 1 - Page HTML et document PDF
- 2 - Animation de l'Annexe coopérative vs collaborative
- 3 - Activité de classement d'exemples selon l'approche coopérative et collaborative

Objectif 3 : *Critiquer les approches; multiprofessionnelle, interprofessionnelle et transprofessionnelle.*

- 1 - Page HTML et document PDF
- 2 - Capsule vidéo (témoignage? Personne âgée qui veut retourner chez elle plus souvent)
- 3 - Animation de l'Annexe continuum de collaboration
- 4 - Activité de classement d'exemples selon l'approche multi, inter et intra
- 5 - Débat sur les avantages et défis de chaque approche (forum de discussion)

Objectif 4 : *Regrouper les idées de la carte conceptuelle par thèmes*

- 1- Identification des thèmes avec l'histoire du petit cochon (Animation interactive)
- 2- Identification des thèmes avec leur propre carte conceptuelle (Forum de discussion)

Semaine 3

Unité 3

Objectif 1 : *Situer la FIPCCP dans le contexte national et international*

- 1 - Page HTML
- 2 - Situer ce que les participants connaissent sur les initiatives (Forum de discussion)
- 3 - Animation des événements clés
- 4 - Document PDF

Objectif 2 : *Préciser les liens à créer dans mon milieu de travail d'après les composantes du modèle de la FIPCCP de Santé Canada*

- 1 - Page HTML
- 2 - Lien au modèle FIPCCP sur le site de santé Canada (PDF)
- 3 - Animation de l'explication du modèle
- 4 - Lien au chapitre 10 sur le site de Santé Canada (PDF)
- 5 - Faire le lien avec les interactions à adopter selon le modèle (Forum)

Objectif 3 : *Créer les sous-systèmes de la carte conceptuelle*

- 1- Identification des sous-systèmes avec l'histoire du petit cochon (Animation interactive)
- 2- Identification des sous-systèmes avec leur propre carte conceptuelle (Forum de discussion)

Semaine 4

Unité 4

Objectif 1: *Reconnaître sa capacité d'influencer l'identité professionnelle des apprenants face à la PCCP*

- 1 - Page HTML
- 2 - Document PDF
- 3 - Capsule vidéo, exemple en situation académique
- 4 - Rétroaction fournie (capsule, narration, pdf?)
- 5 - Capsule vidéo, cas rhumatologie, exemple comment appliquer les concepts clés
- 6 - Relater un exemple vécu ou fictif d'enseignement (partage d'information) qui applique les concepts appris (Choix forum ou courriel)

Objectif 2: *Analyser l'importance des éléments facilitateurs et des obstacles pour implanter la FIPCCP*

- 1 - Page HTML
- 2 - Document PDF
- 3 - Quelles catégories s'appliquent à votre milieu de travail. Partagez des exemples concrets (Forum de discussion)

Objectif 3 : *Créer des liens entre les sous-systèmes de la carte conceptuelle*

- 1 - Identification des liens entre les sous-systèmes avec l'histoire du petit cochon (Animation interactive)
- 2 - Identification des liens entre les sous-systèmes avec leur propre carte conceptuelle (Forum de discussion)

Semaine 5

Unité 5

Objectif 1 : *Ressortir les compétences clés de la collaboration, les domaines d'apprentissage, les déterminants dans différentes situations de FIPCCP*

- 1 - Page HTML
- 2 - Document PDF
- 3 - 4 cas (vidéo, BD ou autre), demandent aux apprenants de ressortir les compétences, domaine et déterminants ciblés dans chacun des cas.
- 4 - Rétroaction avec réponses
- 3 - Discuter des compétences à atteindre (qu'en pensent-ils? Est-ce raisonnable?) (Forum de discussion)

Objectif 2 : *Analyser le système et élaborer un plan de transformation pour l'application de la carte conceptuelle*

- 1- Analyser le système et présenter un plan pour l'histoire du petit cochon (Animation interactive)

2- Analyser le système et élaborer un plan pour l'application de la carte conceptuelle. Écrire environ 6 phrases pour expliquer le système (Forum de discussion)

Semaine 6

Unité 6

Objectif 1: Découvrir des méthodes pour mesurer les résultats de la pratique interprofessionnelle

- 1 - Page HTML
- 2 - Document PDF
- 3 - Partager des idées pour l'évaluation d'une initiative pour la PCCP (Forum)

Objectif 2 : *Stimuler une discussion au sujet de sa carte conceptuelle.*

- 1- Présentation de la carte conceptuelle avec rétroaction des collègues.

Réflexion post-atelier

Quiz avec rétroaction (Act. préparatoire 2 _ Réflexion pré-post atelier_interprofessionalisme.doc)

Appendix P – Calendar of events

CNFS : Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail

Calendrier d'événements

Date suggérée	Sections (s)	Objectif(s) visé(s)	Activités d'apprentissage / Médias
Compétences visées: 1. Intégrer les concepts associés à l'enseignement des pratiques interprofessionnelles 2. Stimuler et enseigner les pratiques interprofessionnelles dans son milieu de travail			
Avant de commencer : Préparer son ordinateur			
Du 18 au 25 mai 2006	Vérification technique	Préparer son ordinateur.	- Activer l'outil du campus virtuel : <i>Sonder votre ordinateur</i> - Télécharger les plugiciels
Avant de commencer : Présentation de l'atelier			
Du 18 au 25 mai 2006	Description de l'atelier	- Prendre connaissance du but de l'atelier - Se familiariser avec les modalités d'enseignement du cours	- Capsule vidéo : Présentation des coordonnatrices - Lire la page Web
Avant de commencer : Préparez-vous!			
Du 18 au 25 mai 2006	Introduction à l'atelier	- Se présenter à la classe virtuelle. - Visionner les étapes de production d'une carte conceptuelle	- Capsule vidéo : Introduction à l'atelier - Échanges (forum) : Présentation et discussion d'expériences vécues - Animation : Qu'est-ce qu'une carte conceptuelle - Animation : Exemple d'une carte conceptuelle avec l'histoire des trois petits cochons
Réflexion pré-atelier (Quiz)			
Unité1 : Rôles et responsabilités			
Du 25 mai au 1 ^{er} juin 2006	Rôles et responsabilités	- Expérimenter une stratégie pour apprécier les rôles et responsabilités de chacun. - Discuter des stratégies pour aider les étudiants ou les collègues à être sensibles aux rôles et responsabilités de chacun.	- Lire la page Web : Rôles et responsabilités - Activités (2) : Connaissances des rôles et responsabilités - Échanges (forum) : Discussion au sujet des stratégies pour amener les autres à discuter de leurs rôles ou responsabilités
	Carte conceptuelle	Déterminer le but pour sa carte conceptuelle	- Animation : 1^{ère} étape - déterminer le but - Échanges (forum) : Partage du but de la carte conceptuelle de chaque participant
Unité 2 : Le mouvement vers l'interprofessionnalisme			
Du 25 mai au 1 ^{er} juin 2006	Le mouvement vers l'interprofessionnalisme	Prendre consciences du mouvement vers l'interprofessionnalisme	Lire la page Web : Mouvement vers l'interprofessionnalisme

	La collaboration et la coopération	Distinguer entre la notion de collaboration et de coopération	- Lire la page Web : Collaboration et coopération - Animation : Collaboration et coopération - Exemple : Collaboration et coopération - Activité : Passer de la coopération à la collaboration
	Les approches multi, inter et trans professionnelle	Critiquer les approches multiprofessionnelle, interprofessionnelle et transprofessionnelle	- Lire la page Web : Approches multi, inter et trans professionnelle - Animation : Approches multi, inter et trans professionnelle - Activité : Distinguer entre la notion multi, inter et trans professionnelle - Capsules vidéo : Exemple d'une approche multi, inter et trans professionnelle - Échanges (forum) : Discussion au sujet des capsules vidéo et partage d'exemples
	Carte conceptuelle	Élaborer un champ sémantique pour sa carte conceptuelle.	- Animation : 2^e étape – élaborer le champ sémantique - Échanges (forum) : Partage du champ sémantique de chaque participant
Unité 3 : La formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP)			
<i>Du 1^{er} au 8 juin 2006</i>	Définition, historique et évolution des concepts	Situer la FIPCCP dans le contexte national et international	- Lire la page Web - Animation : documents marquants
	Modèle de la FIPCCP	Préciser les liens à créer dans mon milieu de travail d'après les composantes du modèle de la FIPCCP	- Animation (2 versions) : Modèle FIPCCP - Document : Description du modèle (chapitre 10) - Lire la page Web : trois autres modèles - Exemple : Comment se situer dans le modèle de la FIPCCP - Échange (forum) : Partage de la réflexion individuelle au sujet de comment se situer dans le modèle
	Carte conceptuelle	Regrouper les idées de la carte conceptuelle par thèmes	- Animation : 3^e étape – regrouper les idées par thèmes - Échanges (forum) : Partage des thèmes de chaque participant
Unité 4 : Identité professionnelle, éléments facilitateurs et obstacles à la FIPCCP			
<i>Du 8 au 15 juin 2006</i>	Identité professionnelle	Reconnaître sa capacité à influencer les apprenants face à leur identité professionnelle dans le contexte de la FIPCCP	- Lire la page Web : Identité professionnelle - Capsules vidéo : Identité professionnelle - Échanges (forum) : Discussion au sujet des capsules vidéo
	Les éléments facilitateurs et les obstacles à la FIPCCP	Analyser l'importance des éléments facilitateurs et des obstacles pour implanter la FIPCCP	- Lire page Web : éléments facilitateurs et obstacles - Document : Lahey et Currie, 2005 - Activité : éléments facilitateurs et obstacles pour chacune des composantes du modèle de la FIPCCP - Échanges (forum) : Discussion des éléments facilitateurs et obstacles dans son milieu de travail

	Carte conceptuelle	▪ Créer les sous-systèmes de la carte conceptuelle	▪ Animation : 4^e étape – créer les sous-systèmes ▪ Échanges (forum) : Partage des sous-systèmes de chaque participant
Unité 5 : Compétences clés, domaines d'apprentissage et déterminants associés à la FIPCCP			
<i>Du 15 au 22 juin 2006</i>	Compétences clés, domaines d'apprentissage et déterminants associés à la FIPCCP	▪ Ressortir les compétences clés de la collaboration, les domaines d'apprentissage et les déterminants associés à la FIPCCP	▪ Lire page Web : Compétences clés, domaines d'apprentissage et déterminants associés à la FIPCCP ▪ Capsules vidéo : Exemples d'histoires de cas problématiques ▪ Document : Grille réponse aux capsules vidéo ▪ Échanges (forum) : Partage des pistes de solution
	Carte conceptuelle	▪ Créer des liens entre les sous-systèmes de la carte conceptuelle	▪ Animation : 5^e étape – dessiner les liens en les sous-systèmes ▪ Échanges (forum) : Partage de la première ébauche de la carte conceptuelle
Unité 6 : Évaluation des projets			
<i>Du 22 au 29 juin 2006</i>	Évaluation des projets	▪ Reconnaître l'importance d'évaluer les projets de la FIPCCP	▪ Lire page web : Évaluation des projets ▪ Documents: PÉE et ÉRAI ▪ Capsules vidéo : Exemples d'histoires de cas problématiques (Unité 5) ▪ Échanges (forum) : Proposer une modalité d'évaluation pour chacune des capsules vidéo
	Carte conceptuelle	▪ Élaborer un plan de transformation pour l'application de la carte conceptuelle	▪ Animation : 6^e étape – Identifier les points où agir ▪ Exemple : Paragraphe descriptif ▪ Échanges (forum) : Partage et description de la carte conceptuelle - Partage du plan pour atteindre le but fixer au début de l'atelier
Réflexion post-atelier (Quiz)			

Appendix Q

Pre-workshop survey Summary of findings n= 8 (females)				
Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?				
Structure	Content	Delivery	Service	Outcomes
Participants chose to register in this workshop to help them in their educator role (supervising student, adult learning), their management role (new primary care center), or in their team member role (techniques, improve work situation). Two participants mentioned registering out of curiosity. Participants felt this workshop would relate to their work situation by: • Providing information (references, theory, strategies, and examples). • Offering a window into other participants' interprofessional practices. • Increasing their confidence, enthusiasm and skills as a team member.	Participants felt that working in a team presented the following advantages: • Better understanding of the patient and the healthcare environment. • Ability to provide better service. • Potential to share and learn from one another. • Better understanding of each other's roles and responsibilities. Participants felt that working in a team presented the following challenges: • Protection of professional boundaries • Inability to trust other team members • Negative attitude • Misconception of other's roles and responsibilities • Professional cultural artefacts (language, work schedules, remuneration) • Lack of communication (information, goals)	Participants reported that the advantages of doing the workshop online were: • Flexibility • Accessibility • Own pace • Anonymity (no shyness) • French language One participant felt that online learning accommodated different learning styles and adult learning principles. Participants reported that the disadvantages of completing the workshop online were: • Lack of face-to-face contact • Requires more personal motivation • Technical difficulties	Participants had either a positive or a very positive attitude towards computers. Participants had either no concerns about doing the workshop online or expressed the following concerns: • Time constraints • Technical difficulties • Preference for face-to-face Five of the participants had previously done one or more online courses or workshops with the CNFS or with another learning organisation. Three participants had not done an online course or workshop before.	Participants wanted to learn about the concepts of interprofessional collaboration and apply them to their own work situation to achieve the following: • Resolve conflict • Offer better training • Work toward a common goal • Improve communication • Develop a project One participant wanted to evaluate the online approach to learning.

Appendix R

Temperature check n=1 (female) and online communication n=9 (female)

Summary of findings

Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

Secondary research question: What self-reported outcomes, with regard to CPCP knowledge, skills, attitudes, and practices, will healthcare providers perceive they have achieved or facilitated in their workplace as a result of their participation in an IECPCP eLearning continuing education workshop?

Structure	Content	Delivery	Service	Outcome
The participant who filled out the temperature check reported that the pace of the workshop was too fast. In all, seven requests for prolonging the workshop were received. No other problems regarding to structure were reported either in the temperature check, emails or discussion forum.	The temperature check and the messages commented on the complexity of the interprofessional approach. Participants felt that it represented a paradigm of care that extended beyond team meetings. The participant who filled out the temperature check felt that her experience and previous knowledge had not been taken into account.	Participants shared examples and commented on each others' answers when the discussion subject pertained to content. Participants interacted almost exclusively with the facilitator when the discussion subject related to the concept map or the plan. Participants' feedback about interest, facilitation and discussion was positive.	Three participants did not have access to the workshop before the start date. Only one participant communicated with the person responsible for registration at the CNFS and the problem was resolved. The CNFS initiated communication with the other two participants and fixed the access issue. One of these participants went on to complete the workshop.	The participant who filled out the temperature check believed she had developed new knowledge and skills in interprofessional practices. She also believed she provided a better service as an educator. Finally, she suggested adding telephone discussion with the facilitator (individually or in a group).

Appendix S

Post-workshop survey

Summary of findings n=5 (females)

Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

Secondary research question: What self-reported outcomes, with regard to CPCP knowledge, skills, attitudes, and practices, will healthcare providers perceive they have achieved or facilitated in their workplace as a result of their participation in an IECPCP eLearning continuing education workshop?

Structure	Content	Delivery	Service	Outcome
Participants generally thought that the website was well organised, uncluttered and functional. One participant thought that the navigation was difficult.	Where applicable, participants stated that the workshop respected their previous knowledge and experience. The content seemed to be interesting, useful, and applicable to their work situation. One participant mentioned that she liked the visual content.	All the participants except for one asserted that the course had maintained their level of interest. All the participants thought that the workshop expectations were clear and one participant stated that these expectations were not in line with her own expectations.	Participants emphasised that they had received administrative and technical support from knowledgeable individuals and that support was provided quickly.	All the participants expressed that the workshop had been helpful with regards to their teaching activities.
Two participants explained that there were two groups of activities in the workshop (the content and the plan) and that this was a deterrent to participation. One participant suggested that the workshop be separated into two parts.	One participant asserted that the content was difficult to understand but not because of the language used but the organisation of the content. She would have preferred to have started the conceptual map and the plan later in the workshop. This related to another participant's opinion which was that the content was not well organised and as a result she had not met her personal learning objectives.	None of the participants had difficulty accessing a computer; however, one participant would have preferred attending a face-to-face class.	Participants reported that the facilitator responded quickly when a suggestion was made or when information was requested. One participant emphasised that the willingness of the facilitator to extend the workshop on more than one occasion helped her complete the course.	All the participants reported having experienced the following outcomes: • Constructed new knowledge as a CPCP educator. • Changed their attitude with regards to CPCP. • Delivered better service to the peoples they teach or train at work. • Worked more effectively with their team.
Two participants mentioned that the length of the workshop was inadequate for the amount of content and that it wasn't a desirable time of year to offer the workshop.	Another participant found grammatical mistakes in the web pages and suggested that the workshop be revised. She also suggested that the post-course survey be structured differently and should not be graded.	All the participants enjoyed participating in the discussion forum and thought that the facilitator provided realistic and relevant examples and respected their opinions. One of the participants found that the messages were sometimes lengthy and required more time to read and respond to than would be required in a face-to-face format.	One participant wished that the CNFS would act to help secure employer support to facilitate the learning process. She also appreciated that the CNFS reoffered the workshop which allowed more flexibility. Another participant mentioned that she was grateful that the workshop was free of charge.	All but one participant believed they had gained CPCP skills, had applied them in their workplace and had developed new ideas on how to stimulate or teach CPCP.
All the participants thought they had reported having increased their level of confidence in stimulating CPCP and having had the opportunity to apply what they had learned during the workshop.				One participant expressed that she had gained new knowledge about the intricacies of the CPCP approach. She believed she better understood the difference between multidisciplinary and the CPCP approach and was able to explain its value to others.
All the participants thought they had the opportunity to reflect and to interact with other learners in the workshop. One participant commented that the participation in the discussion forum was erratic and would have preferred more rigid deadlines for completing activities.		One participant expressed that she had not received prompt feedback from the facilitator on her work and had not been made aware of the areas where she could improve.		
The participants thought that the course activities were supported by the workshop objectives. One participant stated not having the opportunity to self-evaluate.				

Appendix T

Low or no participation email

Responses and summary of findings n=8 (females)

Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

Responses (translated from French to English)

Summary of findings

What are the challenges that prevented you from participating in the workshop?

1. Once I was teaching at the end of the semester I had no more energy. I needed a break. I should have warned you that I wouldn't participate. Sorry.
2. I was supervising a student for the first time and I needed to prepare and that increased my workload. I was also part of a project at work. My intentions were good but I just had too much on my plate.
3. My father passed away and then I had a vacation planned. I was just too busy.
4. I had a personal misfortune. I wasn't even able to start the workshop.
5. I had another course to take for my MBA which I hadn't counted on and it required more time than I thought.
6. I was overloaded at work and I'm just starting to tread above water. It's not in my nature to not follow on my commitments. Sorry.
7. I tried the impossible to complete the course. The decrease in human resources, sick leave and vacation invaded my schedule. The little time I spent on the site really opened my eyes.
8. I had started some online courses with UBC to obtain a bachelor in science. I also had some new courses to prepare for September. It was too much.

The participants felt overwhelmed by their workload or their personal obligations. Many were pursuing undergraduate or graduate studies at the same time.

What are the facilitators that could help you participate in the workshop?

1. The subject is really interesting.
2. Time off at work to do the workshop would be helpful, for a face-to-face workshop that is.
3. To have the flexibility to take it again.
4. To take it another time.
5. More time.
6. I would like to have the opportunity to take it again.
7. Blocking time at work.
8. I like the CNFS courses, all I need is time I guess.

The participants want the flexibility to be able to retake the workshop at a more convenient time. They would also appreciate release time at work to complete the learning activities.

One participant felt that a face-to-face workshop would be a facilitating factor.

Appendix U

Post-workshop interviews with learners

Summary of findings n=10 (females)

Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

Secondary research question: What self-reported outcomes, with regard to CPCP knowledge, skills, attitudes, and practices, will healthcare providers perceive they have achieved or facilitated in their workplace as a result of their participation in an IECPCP eLearning continuing education workshop?

Participation

Motivation

- Many participants had to do the workshop on their personal time. They explained that it was difficult to coordinate personal obligations and workplace obligations. Participants who had received employer support and who were able to block time in their schedule appeared more motivated to participate.
- Some participants were pursuing undergraduate or graduate studies and felt that the workshop competed with these other educational endeavours.
- Participants appreciated that the workshop was offered free of charge and online. This offered flexibility and incited them to register. They didn't feel accountable to anyone.
- Since the workshop did not provide course credits, participation was often intrinsically motivated. Participants seemed to be seeking for personal growth, personal satisfaction and a sense of well-being.
- Participants also enumerated a number of extrinsic factor for motivation, such as meeting an employer's demand for interprofessional practices, satisfying regulatory board requirements for professional development, or furthering their career.

Expectations

- Few participants paid attention to the course expectations beforehand. They tended to assume how the workshop would be structured based on previous participation in other online courses or workshop, regardless of the topic.
- Participants based their perception of the workload on the introduction text of the workshop without consulting the content pages.
- The concept map often made participants think of previous learning experiences where theory was followed by an in-depth practical application. They perceived the concept map as a difficult activity that required more time and effort than anticipated. This incited some learner to delay participation until they felt they had more time or were more disposed to complete the workshop.
- When an activity seemed too difficult or required more time to complete, participants tended to eliminate it rather than complete it.

Learning preferences

- Participants wanted to print all of the course content. They reported that it facilitated reading and allowed them to share the information.
- Many participants expressed a preference for face-to-face training rather than online learning.
- Uneven participation seemed to negatively impact motivation.
- Participants had a tendency to overlook explanations and instead immediately try the activities.

Satisfaction

- Participants reported that the workshop responded to their needs. They said they would recommend the workshop to colleagues, and in some cases, preferably if the structure of the workshop was modified.

Structure

Time factors

- Participants stated that the workshop required more than six weeks to complete. However, participants didn't necessarily want to extend the workshop to eight or more weeks. They did agree that the workshop represented more than 20 hours of training.
- The time of year during which the workshop was offered was a mitigating factor for many participants. Summer vacation or increased activity outside of the workshop interrupted participation.

Interactivity

- Participants valued online interaction. The discussions helped them to better understand the content. They also compared their responses to other learners' responses to measure their level of understanding.
- The discussion met a need for personal contact and countered the sense of isolation created by the online environment. In some cases the participant lived in a remote community and felt that online courses provided a window to the rest of Canada.
- A few participants suggested real time (synchronous) activities to increase personal contact. One participant explained that synchronous activities usually pose a problem because of time zone differences. She approved of the decision to include only asynchronous activities.
- Many participants maintained that it was time consuming to read all the messages on the discussion forum and to formulate an answer.

Community

- Participants sought out other learners with similar or complementing interests and would focus their attention on these learners' postings.
- Some participants expressed that they wanted to pursue their discussion with certain learners after the workshop ended.
- Two participants explained that they would prefer to team up with one or more colleagues to complete the workshop.

Pedagogical strategies	- Participants commented on the pertinence of the topics covered. They asserted that the content corresponded to their need; however, they questioned the organisation of the activities. They explained that it was difficult to work on a concept map and a plan when they were still trying to understand the concepts of interprofessional practices. - While some participants wanted fixed deadlines to complete the units, others enjoyed being able to complete the activities when it suited them. - Although the concept map was perceived as an imposing challenge, it provided a strong sense of satisfaction for those who did complete it. - Participants responded favourably to the idea of splitting the workshop into two levels: one level for the content and another level for the concept map. - Participants evaluated their learning by comparing their answers to those posted by the participants. - They also equated learning with the number of activities completed.
Documentation of learning	- The videos, cartoons and animations helped participants understand the theory. - They enjoyed completing the activities and found that the stories were realistic. - Participants stated that they found the site easy to navigate. One participant did have difficulty finding which unit she had seen a particular concept in. Consequently she thought the navigation was difficult. - Participants also had difficulty navigating the website because of two parallel activities (theory and plan) throughout the workshop.
Media	
Usability	
Content	
Comprehensiveness	- Participants felt that the content was presented in a pleasing format. - Participants stated that the information was interesting and combined an appropriate mix of theory, examples and activities. - The content corresponded to the participants' needs and was helpful. - Participants explained that workshop required a higher level of learning. Although they viewed this as a positive aspect of the course they had not expected it and were not ready for it. They felt overwhelmed. Redistributing the content over a longer period of time was frequently proposed as means to resolve this issue.
Authenticity	Participants perceived that the content of the workshop was evidence-based. They believed it increased their level of confidence in the interprofessional approach and the likelihood that they could convince others about it.
Relevance	- Participants stated they had a better grasp of where the concepts came from and how to apply them to resolve problems in the workplace. - Participants reported that the concepts and the examples were transferable to their work-situation. - The workshop seemed to be intimately linked to the participants' social role and respond to personal needs.
Language	- Participants who completed the concept map commented that it helped them solve problems. - Participants thought that the language used to explain interprofessional concepts was appropriate. - Some participants explained that the language used to describe each of the steps to develop a concept map and a plan was unknown to them. This appeared to create a less inviting learning environment. Some participants emphasised the necessity of learning the correct terminology.
Delivery	
Facilitation	- Participants commented on the importance of the formative feedback and guidance received from the facilitator. - Facilitator comments and examples helped participants ascertain if they had understood the activities and concepts.
Flexibility	- eLearning seemed to fit with the participants' work schedule and family life. - The fact that the CNFS workshop was non-credited and was offered at no cost to participants provided the participants with the opportunity to easily reprioritize when unforeseen circumstances occurred.
Accessibility	- For some participants, firewalls prevented access to the workshop from their place of employment. - The eLearning approach allowed participants to complete the workshop activities from home or work. - The eLearning format brought much needed continuing education to outlying or under serviced communities.
Technology	- Participants contended that eLearning was compatible with the needs of today's healthcare providers. - eLearning was viewed as an evolution in continuing education approaches. - Participants did mention that eLearning required more work than the face-to-face format because it promotes self-directed learning.

Service	
Learning organisation	• The CNFS was perceived as a provider of quality French language eLearning programs specifically intended for healthcare providers.
Technical support	• One participant reported not being able to access the workshop whereas another experiences difficulties opening documents from her home computer.
Responsiveness	• Once she was able to find who to call, the participant with the access problems received the help she needed. • The participant who couldn't open documents from her home computer chose not to seek technical support.
Outcomes	
Knowledge	• Participants reported having constructed the following CPCP knowledge: ◦ Advantages of the approach. ◦ Steps to follow to develop a plan. ◦ Legal aspects of role sharing. ◦ Definitions of the different approaches to team-based care. ◦ Levels of evidence. ◦ Difference between collaboration and cooperation.
Skills	• Participants reported having developed the following CPCP skills: ◦ Know how to stimulate collaboration during team meetings. ◦ Know when and how to stimulate or teach CPCP concepts. ◦ Be able to diagnose team problems and work toward resolving them. ◦ Know how to facilitate communication between team members.
Attitudes	• Participants reported having the following change in attitude with regards to CPCP skills: ◦ Importance of thoroughly evaluating the work environment before starting a CPCP project. ◦ Value of other professions' input on projects and patient care. ◦ Necessity of communication and role sharing to have a global view of the patients' needs.
Practices	• Participants reported having learned the following CPCP practices: ◦ Training staff to represent the team rather than their profession when providing information to patients and their families. ◦ Collecting information from all the healthcare provider groups within the organisation before developing a program. ◦ Discussing the concepts of interprofessional practices with colleagues at work. ◦ Integrating CPCP concepts into training programs. ◦ Providing equal voice to all team members. ◦ Spurring discussions about roles and responsibilities whenever possible. ◦ Insisting on including representatives from different professions on the training team.

Appendix V

Post-workshop interviews with production team Summary of findings n=3 (2 females and 1 male)

Primary research question: What are the factors that facilitate and undermine the effectiveness of an IECPCP eLearning continuing education workshop designed to train CPCP educators, with regards to the workshop's structure, content, delivery, service, and outcomes?

Participation

Motivation	The team felt that they had little recourse with regards to providing extrinsic motivation to increase participation. They believed that the high drop-out was part of the reality of a non-credited continuing education workshop. They suggested that leverage for participation is weak.
Expectations	- The instructional designer felt that the team had overestimated the participants' knowledge about CPCP. The team didn't expect that definitions would be the highlight of the workshop for many of the participants. - The team was aiming for higher order learning and had posited that it was a fit with the targeted learners (educator and managers). - The team thought participants would be able to finish the workshop within the six-week time frame.

Structure

Time factors	Although the team struggled with the volume of content in the design phase they didn't realise that volume would also be an issue for the participants.
Interactivity	- The team explored how they could modify the discussion forums to decrease the length of the posted messages without impairing the reflection process. - Discussion between team members was important to the process of understanding the content prior to developing the workshop. This reinforced the need to embed interaction within the workshop activities for the learners to experience the same kind of shared learning.
Pedagogical strategies	- The team always worked within the six week confines of the workshop which dictated some of the pedagogical strategies chosen such as the parallel structure of the workshop. - The team had been convinced that providing one unit of content and directly applying it to the concept map would benefit the learning process. They were surprised to find out that this structure had in fact hindered the learning process. - The team agreed with the participants that the course should be divided into parts, however, they expressed a preference for three workshops rather than two. They also recommended a break of no more than a one week between workshops. - The team deliberated a long time before choosing the concept map as a main activity for the workshop. The instructional designer pointed out that the concept map fit within the overall purpose of the workshop, to bring the participants to stimulate change in their workplace. The team was convinced of the activity's value but was concerned about whether participants would complete such an activity in a non-credited continuing education workshop. - The team was proud of the learning activities they created. Using the story of the three little pigs to model how to develop a concept map while making the story relevant to CPCP was a highlight for all of the team members. - The team didn't have access to an experienced programmer and that caused unforeseen delays and placed undue stress on the team.

Content

Comprehensiveness	The team went to great lengths to produce many activity templates and to reorganise the contents until they believed they had addressed the CPCP contents covered in the workshop from every angle.
Authenticity	- The team believed that the contents were developed in an interprofessional manner and that this would add to the credibility of the workshop. - A strong team dynamic developed between team members and they believed this had translated into the authenticity of the workshop activities.
Relevance	- Contents and activities were continually reworked until the team was confident that they reflected the learners' work situation - Team members had different professional backgrounds and levels of knowledge about CPCP and translated these different perspectives into the workshop activities
Language	The team had anticipated that the participants may have difficulties understanding the steps for developing a concept map and thought the terminology chosen was accessible.

Appendix W

Translated post-workshop interview quotes (from French to English)		
Learners n=10 (females)		
Production team n=3 (2 females & 1 male)		
#	French citation	English translation
Participation		
Motivation		
1	C'est un avantage de pouvoir suivre l'atelier l'extérieur de mes heures de travail, puisque je peux le suivre à la maison, en fin de semaine... Je n'ai pas de compte à rendre à personne, le compte à rendre est à moi. Annette	It's an advantage for me to be able to follow a workshop after work hours because I can follow it at home or during week-ends... I don't owe anything to anyone; I owe it only to myself. Annette (Learner interview)
2	C'est clair que cette formation, je la faisais sur les heures de travail et je ne la faisais pas par loisir chez nous la fin de semaine. Je voulais faire ça durant mes heures de travail. Si j'avais eu une formation à l'extérieur le mercredi, jeudi, ça aurait été sur mes heures de travail. Joanne	It's clear that I was going to do this workshop on work time and not during week-end leisure time. If I would have attended a face to face workshop on Wednesday and Thursday, it would have been on work time. Joanne (Learner interview)
3	Très, très, très, très lésée... De tout se faire enlever ces petits bonbons là et puis de nous demander d'en faire plus, plus, plus, il me semble, que c'est brûler la chandelle par les deux bouts. Joanne	Very, very, very hurt... To have all these little candies removed and to ask us to do more, more, more, I think it's burning the candle at both ends. Joanne (Learner interview)
4	La moitié de mon temps était pris en charge par l'employeur. <i>Toi tu étais essentiellement dégrèvé pour suivre l'atelier.</i> Oui. Je le faisais de la maison, mais je commençais plus tôt le matin avant d'aller au travail. <i>Pour toi est-ce que ça été un élément facilitateur.</i> Définitivement! Sophie	Half of my time was covered by the employer. <i>So you received release time to participate in the workshop.</i> Yes. I would do it from home, but I would start earlier in the morning before going to work. <i>Was this a facilitating factor for you?</i> Definitely! Sophie (Learner interview)
5	Tu sais, on nous dit : « Oui, oui, oui c'est une bonne idée, bloque du temps et fais-le ! » Mais, quand vient le temps, il faut que je fasse autre chose ailleurs, j'ai des nouveaux échéanciers à rencontrer. C'est un non-sens, une incongruité à mon avis. C'est dans ce sens là que si c'est un cours obligatoire pour mon travail bien alors, supporte moi! Vickie	You know, they tell us: 'Yes, yes, yes it's a good idea, block time out and do it!' But, when the time comes, I have to do something elsewhere, I have new deadlines to meet. This doesn't make sense; it's incongruous in my opinion. It follows that if this is a compulsory course for my work, then support me! Vickie (Learner interview)
6	C'est vraiment ce que je faisais à ce moment-là qui a fait que je ne pouvais plus du tout accorder de temps à cet atelier là. Cassandra	It's really what I was doing at that time that stopped me from being able to participate in the workshop. Cassandra (Learner interview)
7	Je pense que c'est la motivation interne qui me pousse à suivre un atelier comme celui-ci... Tu sais, une motivation individuelle, dans la recherche du bien-être dans mon travail, je pense que c'est ça. Justine	I think it's internal motivation that pushes me to follow a workshop like this... You know, a personal motivation to search for well-being in my workplace, I think that's what it is. Justine (Learner interview)
8	Moi je pense que ça, c'est un peu représentatif des étudiants adultes. Ça ne sert à rien, on prend ce qu'on veut prendre puis on ne se sent pas coupable parce qu'on ne le fait pas tout. Carole	I think that this is representative of adult learners. It's no use, we take what we want to take and we don't feel guilty because we haven't done it all. Carole (Production team interview)
Expectations		
9	J'ai bien aimé le calendrier même si n'est pas un calendrier coulé dans le ciment parce que c'est flexible et ça me donne ce que j'ai besoin pour m'organiser finalement... c'est pour ça que j'aime les ateliers en ligne. Vickie	I really liked the calendar even if it wasn't cast in stone because it was flexible and it gave me what I needed to organise myself... That's why I like online workshops. Vickie (Learner interview)
10	Quand je suis arrivée, je me suis dit : « Oh! Mon Dieu ! » Je suis revenue aux objectifs de cet atelier là et j'ai vu que c'était beaucoup plus grand comme impact. Cassandra	When I started, I told myself: 'Oh! My God!' I came back to the objectives of this workshop and then I saw that it was a lot bigger in terms of impact. Cassandra (Learner interview)
11	Pan toute! Je n'avais pas regardé ça! Nicole	Not at all! I didn't even look at that! Nicole (Learner interview)
12	Bien moi, ça m'a fait peur! Je me suis dit : « Mon Dieu! » Il me semble que c'est beaucoup de travail et pourtant cela n'aurait pas dû parce que je prends des cours au MBA... Je ne sais pas si ce n'était pas assez clair... mais cela m'a fait peur. Roxanne	Well it scared me! I told myself: 'My God!' This seems like a lot of work yet it shouldn't because I take MBA courses... I don't know if it's because it wasn't clear enough... but it scared me. Roxanne (Learner interview)
13	En premier ça m'a fait penser au « mind mapping » auquel j'avais été exposée avant de venir ici. Puis je comprends le concept, c'est pour cela que je savais qu'en me connaissant moi, la manière que je travaille, je savais qu'il fallait que je prenne du temps pour ça, pour aller puiser	At first it made me think of mind mapping a concept I had been exposed to before coming here. I understand that concept and that's why, knowing myself and the way I work, I knew I had to take time for that, to go dig in my knowledge base. Vickie (Learner interview)

14	dans mes connaissances. Vickie C'est intéressant parce que ça été très exigeant pour les participants et pour nous à la conception. Dans les deux cas, ça été exigeant et on a sous-estimé ça. Les participants l'ont sous-estimé même en le sachant et puis nous on l'a sous-estimé même en le sachant... Je pense à quand on a voulu développer un exemple pour développer une carte conceptuelle. Ça été long, ça été très long. Laura	That's interesting because it was demanding for the participants and for us during the design phase. In both cases it was demanding and we underestimated that even if we knew... I think of when we wanted to develop an example for the concept map. It took us a long time, a very long time. Laura (Production team interview)
Learning preferences		
15	Je me suis branchée au début... Je me suis fait un beau cartable bien organisé et il est resté là. Je n'ai pas été plus loin. Annette	At the beginning of the workshop I connected to the site... made myself a beautiful, well-organised binder and it stayed there. I didn't go any further. Annette (Learner interview)
16	Je n'étais pas sûre qu'elles étaient les attentes... remarque que je n'étais pas allée voir les consignes. C'est peut-être aussi parce que j'étais pressée dans le temps. Je me suis essayée quand même. Vickie	I wasn't too sure what the expectations were... well I hadn't really looked at the explanations. I was also quite pressed for time. I ended up trying it anyways. Vickie (Learner interview)
17	Satisfaction C'est vraiment un bon cours... Moi je recommanderais que ce soit suivi par les nouveaux employés et que les gestionnaires des organismes adoptent cette façon de faire... Il faut apprendre à travailler ensemble. Justine	This is really a good workshop... I would recommend that it be followed by all new employees and that managers adopt this way of functioning... We need to learn how to work together. Justine (Learner interview)
Structure		
Time factors		
18	...Il y avait beaucoup de contenu pour six à huit semaines d'atelier... Si je regarde le contenu qu'on a dans nos ateliers en ligne sur l'art de superviser des stagiaires, ils ont l'air minime à comparer avec ce qu'on a mis comme contenu dans l'atelier interprofessionnel. Carole	...There was a lot of content for a six to eight week workshop... If I look at the content we have in our other workshops on clinical supervision, they look minimal compared to what we put into the interprofessional workshop. Carole (Production team interview)
19	Quand tu t'embarques évidemment, plus c'est court, mieux c'est. Par contre un coup dedans et que tu te rends compte du travail qu'il faut y mettre, je pense que c'est bienvenu d'avoir deux semaines de plus. Nicole	When you get on board, obviously, the shorter it is, the better it is. However, once you're in the workshop and you realise the work that needs to be done, I think I would welcome two extra weeks. Nicole (Learner interview)
20	J'aurais aimé plus que six semaines, oui! Huit semaines? ... Six semaines c'était un élément motivateur pour moi dans le sens qu'au même titre que les cours qui se donnent à l'université à la session du printemps, six semaines ça passe vite. C'est gros, ça peut être intensif, mais après ça, tu as fini. Vickie	I would have liked more than six weeks, yes! Eight weeks? ... Six weeks was a motivational factor for me, in the sense that it is the same as courses offered by universities during the spring and summer seasons, six weeks goes by fast. It's big, it can be intensive but, after that you're finished. Vickie (Learner interview)
21	En tout cas, c'était l'été aussi. Les vacances tout ça, j'ai comme tassé ça de côté, mais après coup j'ai réalisé que : « Ah! J'ai manqué quelque chose qui aurait pu être intéressant ». Joanne	Anyhow, it was also summer with vacations and all that. So I pushed it aside, but it's only after, that I realised: 'Ah! I missed something that could have been really interesting'. Joanne (Learner interview)
22	Ce que j'ai trouvé difficile c'est le 'timing'. Parce que pour moi, c'était un temps de l'année où est-ce qu'il y avait beaucoup d'activités au travail, donc je n'avais pas beaucoup de temps à y consacrer. Lise	What I found difficult was the timing. Because for me, it was a time of year where there was a lot of activity at work, therefore I didn't have a lot of time to dedicate to the workshop. Lise (Learner interview)
Interactivity		
23	J'ai appris beaucoup sur le concept de l'interprofessionnalisme. Même si je pensais en avoir une idée, bien c'est sûr que j'en avais une petite idée, mais là mon idée est pas mal plus claire. Laura	I learned about the concept of interprofessionalism. Even if I thought I knew what it was, well I certainly had some idea of what it was; now it's much clearer. Laura (Production team interview)
24	Des fois je me disais, « Ben voyons, qu'est-ce que je suis supposée de faire ici ? » et puis quelque un écrivait quelque chose puis je me disais : « Ah! Bien là je pense que je comprends » puis je voyais l'application des idées, l'application des concepts. Puis tes commentaires également étaient utiles, parce qu'il y avait beaucoup d'idées de ta part qui étaient développées, qui encore une fois concrétisait les choses... c'est certain que ça rendait le cours beaucoup plus intéressant. Lise	Sometimes I would ask myself: 'what am I supposed to do here?' Then someone would write something and I would say: 'O.K.! Now I think I understand'. I could see how the ideas and the concepts were being applied. Your [the facilitator's] comments were also useful because many of your ideas were well developed and that also helped to make things concrete... it certainly made the workshop more interesting. Lise (Learner interview)
25	Pour moi c'est super, je suis à l'autre bout du pays, je peux faire mes commentaires à minuit le soir. Je peux faire ça à huit heures le matin, tu sais vous êtes complètement dans un autre horaire. La vidéoconférence, quand il faut que tu te branches le matin puis [quelqu'un dans un	For me, this is superb. I'm at the end of the country and I can write my comments at midnight. I can do this at eight o'clock in the morning; you know you're completely on another schedule. In the case of videoconferencing, when you need to connect in the morning and [someone in

	autre fuseau horaire] cédule ça à 9h, c'est 6h chez nous. Je ne peux pas y participer. Sophie	another time zone] schedules it at 9am, well that's 6am here. I can't participate. Sophie (Learner interview)
26	Je trouve ça le fun de voir que dans le fond, on est tous pareil au bout du compte, peu importe la région. Quand on se compare, on se console comme on dit. En quelque part on réalise qu'on n'est pas à côté de la « track » puis c'est le fun d'aller chercher des trucs que les autres apportent et auxquels on n'a pas pensé. C'est vraiment un mélange d'idées. Nicole	I think it's fun to see that in essence we're all the same, regardless of the region. There's a saying that when we compare each other, we console each other. Somehow, we realise that we're not off track and it's fun to get tricks from other participants that we hadn't thought of before. It really is a mix of ideas. Nicole (Learner interview)
27	Je trouve ça un peu lourd d'avoir à lire les commentaires de tout le monde. Je trouve que ça prend énormément de temps... Parfois, je trouve que ça devient trop exigeant. Lise	I find it a little heavy to read everyone's comment. I find it takes a lot of time, a lot more than if I was sitting in class... Sometimes I think it's too demanding. Lise (Learner interview)
	Community	
28	Ça prit un certain temps, en fait ça prit plusieurs modules avant qu'on sente : « Ah! Mais c'est les mêmes personnes qui reviennent. » Et là Oops! Les gens discutent plus. Cassandra	It took a certain time, in fact it took a few modules before we felt, Ah! It's the same people that keep coming back and then Oops! People discuss more. Cassandra (Learner interview)
29	Ça aurait été plaisant s'il y avait eu plus de personnes, plus de participants qui auraient tenu jusqu'au bout parce qu'on voyait les commentaires des différentes personnes, mais puis que ça avançait moins qu'il y avait de participants. Mais je dois dire que Sophie était fameuse. J'ai tellement aimé ces idées et ces commentaires. Elle était fabuleuse comme participante. Lise	I would have liked it if there could have been more people, more participants that would have held on until the end. We could see different comments that people posted but as more we went forward, we had fewer participants. However, I must say that Sophie was incredible. I really enjoyed reading her ideas and comments, she was a fabulous participant. Lise (Learner interview)
30	Après avoir été sur le site web, est-ce que c'est un atelier auquel tu te réinscrirais? Oui, je m'inscrirais à nouveau, mais j'aimerais peut-être si quelqu'un d'autre du milieu le prendrait aussi, prendrait le cours. Roxanne	After going on the website, is this a workshop that you would want to take again? Yes, I would register again, but I would like it if someone else from my workplace took the course with me. Roxanne (Learner interview)
	Pedagogical strategies	
31	La carte conceptuelle, ça m'a comme débarquée, c'était trop. Tout ce qui était expliqué, les petits vidéoclips, je trouvais ça très bien. Je n'étais pas prête à faire une carte conceptuelle. Je n'avais pas assez de notions, de connaissances pour vraiment avancer. Je n'avais pas une vision globale d'où je m'en allais avec ça. Alors, cela a été la partie qui m'a démotivée, qui était la moins intéressante. Justine	The concept map turned me off, it was too much. Everything that was explained, the small videoclips, I found that great. I wasn't ready to do a concept map. I didn't have enough notions, enough knowledge to really go forward. I didn't have a global vision of where I was going with this. So this is the part that unmotivated me, the less interesting part. Justine (Learner interview)
32	On parlait avec un pré-supposé que les participants qui arrivaient là avaient quand même une certaine base. Connaissaient déjà une partie de la terminologie, arrivaient là pour la pratique plutôt que la théorique, c'était supposé d'être une révision, une mise à jour. Louis	We started with the idea that the participants would have a certain knowledge base; that they knew some of the terminology and were coming more for practice than theory, it was supposed to be a review, an update. Louis (Production team interview)
33	L'atelier est à un niveau cognitif élevé, définitivement. On s'adressait à des gens qui sont au niveau organisationnel, qui sont au niveau systémique et qui sont en train d'implanter ça pour leur groupe, pour leur département. Moi j'ai perçu ça comme ça. Alors ce qu'on leur proposait de faire, c'était de faire un plan en fait. Carole	The workshop was definitely at a higher cognitive level. We were addressing people at the organisational or systemic level who were in the process of implementing this [interprofessional practices] for their group, their department. This is how I perceived it. So in fact, what we proposed to them, was to do a plan. Carole (Production team interview)
34	On essayait d'en arriver à un plan d'intervention sur le terrain. Pour en arriver là, il n'y a pas cinquante moyens... La seule manière de la représenter visuellement c'est la carte conceptuelle. Cette activité là, ça fait ressortir les endroits où justement tu peux agir. Ça aide directement à la planification. Louis	We were trying to arrive at an onsite intervention plan. There isn't fifty ways to get there... The only way to represent this visually is with a concept map. This activity can make the areas where you can instigate change stand out and this directly helps planning. Louis (Production team interview)
35	Je n'aurais jamais pensé à ça parce que comme je te disais moi je ne connaissais pas. Mais maintenant je regarde ça puis je me dis : « Quel outil intéressant au plan pédagogique ». On se n'aperçoit pas quand on le fait, c'est après coup qu'on le voit... C'est fantastique qu'on soit parti de l'histoire des trois petits cochons et puis qu'on en arrive à l'importance de travailler en équipe. Bien transposons cela dans un milieu de travail, puis il y a des éléments qui se ressemblent. Puis c'est ça qui est intéressant, c'est qu'en bout de ligne on débouche sur un outil que les administrateurs comprennent, qu'ils utilisent, qui est un plan d'action. Laura	I never would have thought of this because as I was saying, I didn't know this tool. However, now that I look at this, I say to myself: 'What an interesting tool'. We don't notice it when we do it; it's after the fact that we see it... It's fantastic that we started from the story of the three little pigs and then through the story we arrived at the importance of teamwork. If we transfer this to the work setting, there are similar elements. It's interesting that at the end of the activity we ended up with a tool that administrators understand and use - an action plan. Laura (Production team interview)
36	Aussitôt qu'ils avaient fait une petite étape, on voulait qu'ils appliquent la première petite étape à la carte conceptuelle parce qu'on voulait trouver une façon concrète des les amener à concrétiser leurs pensées au sujet du contenu... et de développer un plan. Carole	As soon as they had finished a small step we wanted them to apply it to the concept map because it was a concrete way to finalise their thoughts on the content... and devise a plan. Carole (Production team interview)

37	On avait choisi de faire la carte conceptuelle de façon concomitante au contenu par ce qu'on voulait les inciter à la faire... Un moment donné c'était aussi le temps de le faire qui nous a influencé; six semaines ce n'est pas beaucoup! Louis	We had chosen to do the concept map concurrently with the content because we wanted to incite them to do it... It was also the time they needed to do it in that influenced us; six weeks, that's not a lot! Louis (Production team interview)
38	Moi j'aime ça faire des schémas, des dessins pour bien comprendre avec des zones et des liens entre eux. J'ai vraiment aimé ça. Sophie	I like doing diagrams or illustrations to really understand, with zones and links between them. I really liked this. Sophie (Learner interview)
39	Media Il y avait le texte de la collaboration et de la coopération, mais quand je voyais comment ça pouvait être simple avec la petite capsule vidéo; celle de la démence ou tout le monde travaillait ensemble. Je me suis dit: « Ah! Bien là! C'est tellement simple! ». Justine	There was the text on collaboration and cooperation, but when I saw how simple it could be with the little video and the [story] on dementia where everyone works together. I told myself: 'Well now! It's so simple!' Justine (Learner interview)
40	J'étais toujours intéressée! Nicole	I was always interested! Nicole
41	J'ai aimé les exercices qui étaient présents et j'ai trouvé les scénarios réalistes. Et puis ça me mettait dans le bain. Les petits vidéoclips, ça donne un aspect plus visuel que lorsque qu'on est dans une classe de format didactique... Moi j'étais déjà habituée avec le format et WebCt, donc les discussions, les rétroactions, c'est très efficace. Vickie	I liked the exercises that were there and I found the scenarios realistic. And it immersed me in the topic. The small video clips, it gives a more visual aspect than if you're in a didactic classroom... I was already used to WebCt, therefore the discussions, the feedback, it's quite efficient. Vickie (Learner interview)
	Usability	
42	Quelle a été ta première réaction? Première réaction? Je me suis dit: « Wow! C'est bien organisé! Ils nous prennent par la main. On ne peut pas avoir plus facile que cela. C'est organisé et c'est structuré! » Ça me semblait comme ça en tout cas. En lisant les premiers paragraphes, j'étais en mesure de comprendre le fonctionnement du cours. Annette	What was your first reaction? My first reaction? I told myself: 'Wow! This is well organised! They take us by the hand. We can't get any easier than this. It's organised, and it's structured!' Anyways it seemed like that to me. When I read the first paragraphs, I was able to understand how the workshop functioned. Annette (Learner interview)
43	La navigation je l'ai trouvée difficile. Je me perdais à certains moments et je me disais: « Bien voyons, je suis capable de travailler en ligne. L'informatique, ça ne me fait pas peur. Je travaille avec ça à longueur de journée, puis j'ai déjà fait des cours en ligne. » Je pense que le fait d'avoir les exercices en deux parties... Moi, ça m'a pris une couple de semaines pour comprendre... Je travaillais sur les contenus et j'oubliais de développer ma carte conceptuelle. Lise	I found the navigation difficult. Sometimes I would get lost and I would say: 'What's up? I can work online. I'm not afraid of computers. I work with them all day and I have done online courses before.' I think it was the fact of having the exercises in two parts... It took a couple of weeks to understand... I would work on the content and would forget to develop my concept map. Lise (Learner interview)
44	Il y avait l'aspect temps, je faisais ni plus ni moins toute tout seul, puis il y a très peu de choses que j'ai pu déléguer. Louis	There was the aspect of time, I was more or less doing everything by myself and there are very few things that I was able to delegate. Louis (Production team interview)
45	Je n'avais simplement plus le temps pour revoir les choses, ce que je fais d'habitude. Louis	I simply didn't have time anymore to review things like I normally do. Louis (Production team interview)
	Content	
	Comprehensiveness	
46	Moi je trouve que les cours que vous offrez sont bien faits. Il y a une grande sensibilité par rapport à notre milieu de travail. Ça reflète souvent des préoccupations qu'on a et puis, l'information vient vraiment nous épauler, pour avoir du bien-être dans notre travail. Justine	I find the courses you offer are well done. They have a great sensitivity with regards to our workplace. They often reflect preoccupations we have and also, the information really supports us, to achieve a sense of well-being at work. Justine (Learner interview)
47	C'est excellent de donner des exemples. L'exemple des trois petits cochons, je me souviens de ça, comment des exemples très, très simples peuvent aider. Ça nous faisait songer à la réalité et comment est-ce qu'on traduit ça dans la pratique. Mélanie	It's excellent to give examples. The example with the three little pigs, I remember that one, how an example so simple can help. It makes us think about reality and how we can translate it into practice. Mélanie (Learner interview)
48	On présentait l'information d'une certaine façon après ça on changeait d'idée et on le présentait d'une autre façon... À la fin, on en est arrivé avec une profondeur et une organisation de contenu qui nous plaisait, mais on y a mis du temps. Il y a eu beaucoup de temps puis beaucoup d'énergie. Carole	We presented the information a certain way and then we would change our mind and we would present it another way... In the end we came up with a depth and organisation of content that we were happy with but we put in a lot of time to get there. There is a lot of time and energy involved in this workshop. Carole (Production team interview)
49	Ce que je peux te dire c'est que si je regarde les autres cours que j'ai suivis avant, c'était de l'information qui était très intéressante, mais c'était plus facile. Là, c'est plus ardu. Je ne dis pas qu'il ne faut pas que ce soit ardu, en quelque part on veut apprendre puis changer des choses... Je n'étais pas préparée à ça donc ça surprend, mais il faut relever le niveau. Ça pour moi c'est approprié, c'est juste de l'adapter. Nicole	What I can say is if I look at the other courses I took before, it was interesting information but it was easier. This one is more arduous. I'm not saying that it shouldn't be arduous; somewhere we want to learn and change things... I wasn't prepared for that so it took me by surprise but we must increase the level [of learning]. That for me is appropriate, it's just to adapt it. Nicole (Learner interview)
	Authenticity	

50	<i>Quel a été l'impact de ce mode de fonctionnement sur l'atelier? Moi, je pense que ça a donné de la crédibilité à l'atelier. Je n'ai pas suivi l'atelier, mais si j'en avais suivi en sachant et en voyant que l'atelier a été conçu par une équipe en interprofessionnalisme au fond, à ce moment là je me dis « Ah! Bon! O.K. C'est crédible, j'ai envie d'embarquer ». Laura</i>	<i>What was the impact of this way of functioning on the workshop? I think that it added credibility to the workshop. I didn't take the workshop but if I had, knowing and seeing that the workshop was developed by a team in an interprofessional manner, I would have told myself: 'Oh! Good! O.K. This is credible. I feel like getting on board'. Laura (Production team interview)</i>
51	<i>La première chose que j'ai remarquée c'était la qualité des références qu'on me donnait. J'étais en confiance, je savais que c'était des bonnes ressources, par exemple celles de Santé Canada. Mélanie</i>	<i>The first thing I noticed was the quality of the references that were given to us. I trusted what was said and I knew these were good resources, for example those from Health Canada. Mélanie (Learner interview)</i>
	Relevance	
52	<i>Moi j'ai aimé ça beaucoup quand on disait, l'équipe peut être représentée par une personne... Ça m'a permis de l'intégrer à la façon dont on travaille. Sophie</i>	<i>I liked it a lot when it said the team can be represented by one person... It allowed me to integrate this in the way we work. Sophie (Learner interview)</i>
53	<i>Donc tu me dis que c'est presque une atteinte à l'estime de soi de se dire : « Pourquoi je ne comprends pas? »</i> <i>Oui, puis d'habitude, je comprends. Mais si c'est compliqué, c'est le fun d'arriver à la fin puis comprendre. Je ne me suis pas rendue jusque là. Je trouve l'idée de changer la façon dont la carte conceptuelle est présentée, excellente. Justine</i>	<i>So you're telling me that it's almost an attack on your self-esteem to ask yourself: 'Why don't I understand?' Yes, and usually I understand. But if it's complicated, it's fun to get to the end and understand. I didn't get there. I find the idea to change the way the concept map is presented, excellent. Justine (Learner interview)</i>
54	<i>J'étais curieuse tant pour moi que dans son application dans le cadre d'un nouveau centre de santé qu'on va créer... Ça remets en question la façon dont on fonctionne, c'est là que je pense que c'est intéressant. Sophie</i>	<i>I was curious for myself and for its [the concept map] application in the case of the new healthcare center that we will create... It puts into question the way we work, that's where I find this interesting. Sophie (Learner interview)</i>
55	<i>C'était le fun parce que des fois on produisait quelque chose, l'une d'entre nous le relisait et puis disait : « Ah! Non! On ne peut pas laisser ça comme ça parce que ce n'est pas clair! »</i> <i>Donc on discutait du problème jusqu'à ce que ce soit clair. Puis avec ça je pense qu'on arrive à la fin avec quelque chose de très grande qualité puis qui soit bien au niveau de ceux qui vont prendre l'atelier. Carole</i>	<i>It was fun because sometimes we would produce something and one of us would reread it and say: 'Oh! No! We can't leave it like this, it's not clear enough!' So we would discuss the issue until it was clear. With this approach, I think we arrived at the end with something of great quality and at the level of those who wanted to take this workshop. Carole (Production team interview)</i>
	Language	
56	<i>Ça faisait peur. C'est comme si ça commençait trop raide. Justine</i>	<i>It was scary. It's as if the start was too abrupt. Justine (Learner interview)</i>
57	<i>Les mots font peur quand c'est des mots qu'on n'utilise pas dans notre quotidien... Je trouve ça intéressant comment on arrive toujours à trouver des termes compliqués pour dire des choses simples. Mélanie</i>	<i>Words are scary when they are not words that we use daily... I find it interesting how we always manage to find complicated terms to say simple things. Mélanie (Learner interview)</i>
58	<i>Je suis dans un milieu francophone en milieu minoritaire, donc les gens, après un bout de temps, le langage technique, ils l'ont en anglais. Même s'ils sont francophones. Donc se tremper là dedans en français, c'est difficile, mais d'un autre côté je suis de l'école où si on ne dit pas les choses avec le vrai nom, on ne l'apprendra jamais. Sophie</i>	<i>I'm in a francophone minority environment, so people, after a while, they use English technical language rather than French terms even if they are Francophone. Therefore, to be exposed to this in French, it's difficult, but from another perspective, I believe if we don't name things with the proper words, we'll never learn them. Sophie (Learner interview)</i>
59	<i>Tu sais, c'est une matière très théorique, très abstraite. Je pense qu'on avait le souci de la vulgariser, d'une part, et qu'on avait le souci de la rendre le plus palpable possible... En tout cas, moi je le sais pour connaître ce milieu vraiment à fond et si on arrive avec des choses trop abstraites, on perd le monde et ça devient un fardeau, ça devient quelque chose d'inaccessible, puis ça devient une barrière plutôt qu'un élément qui va les inciter à penser que ça pourrait leur aider dans leur fonctionnement. Moi je pense que ce souci-là, on l'avait. Laura</i>	<i>You know, this content is quite theoretical and quite abstract. On the one part, I think that we took care to use accessible language and on the other part we tried to make the content as palpable as possible... In any case, I know the environment very well and if we present something that is too abstract we loose our people, it becomes a burden, it becomes inaccessible and it becomes a barrier rather than an element that will incite them to think that this could be helpful for them. I think that we really had that concern. Laura (Production team interview)</i>
	Delivery	
	Facilitation	
60	<i>Moi je trouve que c'est important. Ça confirme que j'ai compris ou ça confirme que je n'ai pas compris. Justine</i>	<i>I find that it's important. It either confirms that I understood or that I haven't understood. Justine (Learner interview)</i>
61	<i>Moi j'ai trouvé que c'était vraiment en application des concepts qu'on était en train d'apprendre... Vraiment, ça a été des outils très, très utiles pour ma formation en tout cas. Lise</i>	<i>I found that they [personal examples] were applying concepts that we were in the process of learning... Really, it has been a very, very useful tool, in any case, for my learning. Lise (Learner interview)</i>
	Flexibility	

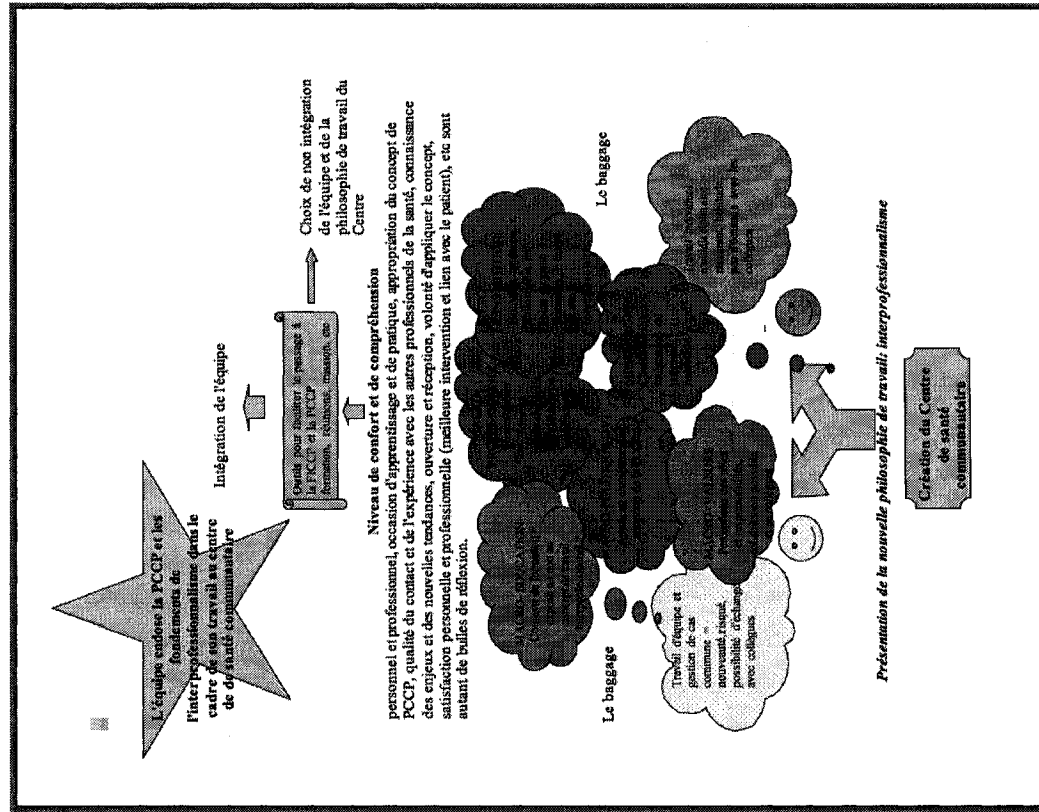
62	<i>Est-ce que j'ai cru entendre qu'en personne ça te plairait aussi? Bon, je ne dis pas non, mais je ne suis pas certaine que j'irais. J'aurais moins d'intérêt par contre. Ça ne me tente plus d'aller à tous les mardis soir prendre un cours. J'aime l'Internet pour ça, je le fais quand j'ai le temps, dans la semaine, à mon goût puis, j'aime bien ça. Nicole</i>	<i>Did I understand correctly that you would also like to take it in a 2f format? Well, I wouldn't say no, but I'm not sure that I would go. Anyways, I would be less interested. I don't feel like going to take a course every Tuesday night anymore. I like the Internet for that. I do it when I feel like it, during the week or when I want too and I like that very much. Nicole (Learner interview)</i>
63	<i>Il y a un participant qui m'a dit : « Écoute, quand tu n'as rien payé, même si c'est très intéressant, c'est facile de le reléguer un peu plus loin dans sa liste de priorité. » Oui. Bien, c'est ce qui avait été un argument pour moi de dire : « Il y a des priorités que je ne peux pas déplacer. Je me dis bon, je reconnais la qualité, mais en même temps, comme il n'y a pas eu de frais et qu'il n'y a pas de pénalité, bien... je pourrai le reprendre. » Oui, ça été un facteur qui m'a aidé à prendre la décision. Cassandra</i>	<i>There's a participant who told me: 'Listen, when you haven't paid anything, even if it's interesting, it's easy to push it back in the list of priorities'. Yes. Well, it was one of the arguments for me to say: 'There are priorities that I cannot move. I recognise the quality but at the same time, since there are no costs or penalties, well... I'll be able to retake it'. Yes, it was a factor that helped me take my decision. Cassandra (Learner interview)</i>
64	Accessibility Je travaille pour un réseau en santé en région éloignée, donc on recommande aux gens de suivre des formations à distance. Sophie	I work for a remote health network, so we recommend to people to follow distance education. Sophie (Learner interview)
65	Technology C'est le futur, c'est vers là où on s'en va. On n'a pas de portes de sortie, c'est beau de dire qu'on aime le mode papier et le mode écrit, mais ce n'est pas la réalité. Je pense que c'est une évolution qui va avec la nouvelle génération. Annette	It's the future; it's where we're going. We don't have another exit, it's nice to say we like the paper or written format but that is not reality. I think it's an evolution that goes with the new generation. Annette (Learner interview)
66	<i>Vous allez apprendre autant que vous le voulez, autant que vous vous poussez à en faire, autrement dit, l'apprentissage vous appartient. Et ça, j'ai appris ça dans mes cours en ligne, c'est que l'apprentissage appartient totalement à l'apprenant. On leur offre des activités, on leur offre des suggestions, mais finalement ça va revenir à l'apprenant. Quand tu es en salle de classe, tu peux un peu plus contrôler ce qu'ils apprennent parce que c'est nous qui leur donnons, ils apprennent de façon passive. Mais quand ils ont à apprendre de façon active, qui sait qu'est-ce qu'ils apprennent. Finalement, ils vont aller chercher autant ou aussi peu qu'ils le veulent. Melanie</i>	You will learn as much as you want to and as much as you push yourself to, in other words, learning belongs to you. I realised in my online courses, that the learning totally belongs to the students. We offer them activities, we offer them suggestions but it will always come back to the learner. When you're in a classroom, you can control what they learn because you're the one who gives it to them. But when they have to learn in an active way, who knows what they learn. In the end, they go get as much or as little as they want. Melanie (Learner interview)
67	Service Learning organisation Tu sais, le CNFS ce n'est pas n'importe quoi. C'est vrai! Ce n'est pas comme faire quelque chose de vaguement connu. Oui c'est reconnu, c'est un organisme qui a une bonne réputation... pour la formation en français de qualité. Sophie	You know, the CNFS it's not just anything. It's true! It's not like doing something that is vaguely known. Yes, it's recognised, it's an organisation that has a good reputation... for quality online training in French. Sophie (Learner interview)
69	Technical support Je ne sais pas qu'est-ce que c'était, j'aurais pu un moment donnée communiquer avec les techniciens pour voir s'il ne pouvait pas m'arranger ça, puis je suis certaines qu'ils auraient été capables de le faire... Puis si je voulais vraiment travailler sur quelque chose à la maison bien je m'envoyais un document par courriel que j'avais travaillé dessus. Lise	I don't know what it was, I could, at some point in time, have communicated with the technician to see if they could fix this and I'm certain they would have been able to... If I really wanted to work on something at home, well I would send myself the document I had been working on by email. Lise (Learner interview)
69	Responsiveness <i>Quel genre de difficulté tu as eu? Je ne pouvais pas entrer, mon code ne fonctionnait pas. Comment tu as fait pour régler le problème? J'ai appelé le numéro qu'on disait de joindre en cas de difficultés techniques, puis ils ont réglé mon problème et j'ai pu me brancher. Je n'ai pas eu de problèmes après. C'est bien! Est-ce que cela a été un peu frustrant? Bof! Cela fait partie des technologies. On y est habitué maintenant. Roxanne</i>	<i>What kind of difficulty did you have? I couldn't enter, my code wasn't working. How did you fix the problem? I called the number I was told to call in case of technical difficulties, they fixed my problem and I was able to connect. I didn't have any problems after that. That's good! Was this frustrating? Bof! That's part of technologies. We're used to it by now. Roxanne (Learner interview)</i>
70	Outcomes Knowledge Dans ce cours, j'ai vu qu'on a évolué et qu'on ne parle plus autant de multidisciplinaire, mais d'interprofessionnalisme... Même si je suis nouvelle dans le centre de santé, ils sont déjà en retard... Ça m'a vraiment étonnée. Justine	In this course, I saw that we have evolved and that we don't speak of multidisciplinary so much anymore but of interprofessionalism. Even if I'm new at the healthcare center, they [the healthcare center] are already behind... This really surprised me. Justine (Learner interview)

71	C'est même des concepts que j'ai discutés avec des gens au travail. J'ai eu l'occasion d'en discuter et de leur dire : « Bien aie! J'ai trouvé de l'information super intéressante. » Puis là on parlait des sujets inter. Lise	I even discussed the concepts with people at work. I had the opportunity to talk with them and say: 'Hey! I found interesting information', and then we talk about interprofessional topics. Lise (Learner interview)
72	C'est sûr que quand on lit l'article il dit qu'il va y avoir certains incidents qui vont ce faire c'est sûr parce qu'on est au début et qu'il va y avoir des jugements qui vont être rendus. Mais il faut penser au-delà de ça, il faut développer une nouvelle ouverture finalement. Puis ça je trouve ça intéressant. Sophie	The article argues that there will surely be incidents because we are at the beginning and court decisions will be rendered, but we have to look beyond that. We have to create an opening and I find that interesting. Sophie (Learner interview)
73	Ça m'a outillée et a nourrit mes arguments. Par exemple, pourquoi je veux tel type de personne dans mon équipe? ... Ça me donne la confiance d'aller chercher cette ressource parce que c'est valable. C'est démontré par telle ou telle étude et ce n'est pas juste mon opinion personnelle. Vickie	It has given me tools to support my arguments. For example, why do I want this type of person on my team? ... It gives me confidence to go and get that resource because it is valuable. It's demonstrated by this or that study and it's not just my personal opinion. Vickie (Learner interview)
74	<i>Est-ce qu'il y a de l'information ou des connaissances que tu es allée chercher sur le site et que tu es maintenant en mesure d'utiliser?</i> Oui, l'idée de l'importance de bien élaborer un plan puis de voir les champs de compétences des différents professionnels. On le savait, mais ça a été concrétisé pour moi de reconnaître l'importance de connaître chacun nos rôles et responsabilités et se développer un plan pour commencer à travailler ensemble. Mélanie	<i>Is there any information or knowledge that you found on the site that you are now able to apply?</i> Yes, the idea of developing a good plan and to review the scope of practice of each professional. We knew that, but it's more concrete now that it's important to recognise each other's roles and responsibilities and to develop a plan to start working together. Mélanie (Learner interview)
Skills		
75	J'ai appris comment on leur dit « Vous savez, oui vous êtes infirmière et quand vous travaillez dans le sud vous n'auriez pas fait ça, mais ici ça va être correct, ici on a trouvé quelqu'un d'autre qui est francophone qui pourrait vous outiller à faire une partie de ce travail là même si théoriquement ce n'est pas dans votre champ de pratique habituel. » Puis pour moi de faire ces rapprochements là c'est plus facile. De pouvoir le présenter aux gens comme ça de façon non menaçante. « Oui ailleurs tu ne le ferais pas, mais ici il va falloir qu'on développe une façon de travailler ensemble ». Sophie	I've learned how to tell them: 'You know, yes you're a nurse and when you worked down south you didn't have to do this, but here it will be O.K. We have found someone else who is Francophone and who can teach you to do part of this work even if theoretically this is not part of your usual scope of practice.' It's easier for me to make those associations now, to be able to present this to people in a non-threatening way. 'Yes elsewhere you wouldn't do this but here we'll have to develop a way to work together'. Sophie (Learner interview)
76	Dans mon équipe, j'ai des nouvelles personnes et les vieux avec les nouveaux, n'ont pas les mêmes idées. C'est comme s'il faut qu'on refasse une dynamique de groupe et là j'ai utilisé ces concepts. Par exemple, partager les rôles, voir ce que chacun peut apporter. Ça je l'ai fait! Ça m'a amené ça! Nicole	I have new people in my team and the old and new people don't have the same ideas. It's as if we have to rebuild the group dynamics and that's where I used some of these concepts. For example, sharing roles and seeing what every person brings. I did that! It brought me that! Nicole (Learner interview)
77	La raison pourquoi c'était si difficile de fonctionner ou un peu même conflictuel, c'est que le rôle des intervenants n'était pas clairement défini. Et puis on a travaillé, là dessus, de définir un peu mieux qui fait quoi. Puis, pour y arriver, on en a parlé et on a fait des histoires de cas... on s'est rendu compte que les patients se promenaient dans l'équipe, mais personne n'avait une vue globale... Tout le monde avait des petits morceaux du casse-tête, mais personne avait le dessin du casse-tête. Justine	The reason why it was so difficult to function or why there was conflict was because the healthcare providers' roles weren't clearly defined. We worked on that, how to define a bit better who does what. We talked about it through case discussions... we realised that patients travelled within our team but no one had a global view... Everyone had a little piece of the puzzle but no one had an idea of what the finished image was supposed to look like... We worked on that. Justine (Learner interview)
78	Mais justement, je faisais de la formation pas plus tard que deux semaines passées puis... je me souviens que j'ai parlé à ce groupe là en particulier de l'importance de la collaboration puis d'échanger, de partager notre plan d'action avec les autres membres de l'équipe puis c'est choses là. Donc j'en ai parlé, ça m'a influencée et je pense que ça va influencer les autres de cette manière là. Lise	Two weeks ago, I happened to be teaching a training session and... I remember that I spoke to that particular group about the importance of collaboration and discussion, about sharing our action plan with other team members as well as other things. So I talked about it, it influenced me and I think it will influence others this way. Lise (Learner interview)
Attitudes		
79	Je vais en faire pleins de cartes, je vais en faire toute ma vie des cartes! Sophie	I will do a lot of concept maps; I'll do concept maps all my life! Sophie (Learner interview)
80	Que ce soit en réaction à la première unité du cours ou une philosophie personnelle, je trouvais que c'était important d'avoir tout le monde autour de la table pour parler ensemble. Mélanie	Whether it was in reaction to the first unit of the course or if it was my personal philosophy, I found it was important to have everyone around the table to talk together. Mélanie (Learner interview)
81	La vision a commencé... On a pu déterminer un plan de traitement pour poursuivre les soins des patients... puis l'équipe a été contente et enthousiaste. C'est la première réalisation qu'on a faite. Je pense que cette tradition va bien vieillir dans l'équipe. Je pense que ça répondait à un besoin, puis que ça a créé un sentiment d'appartenance à l'équipe. Justine	The vision has started... We were able to develop a plan to continue patient care... and the team was really pleased and enthusiastic. This was our first accomplishment and I think this tradition will age well within the team. I think this activity answered a need and created a sense of belonging to the team. Justine (Learner interview)

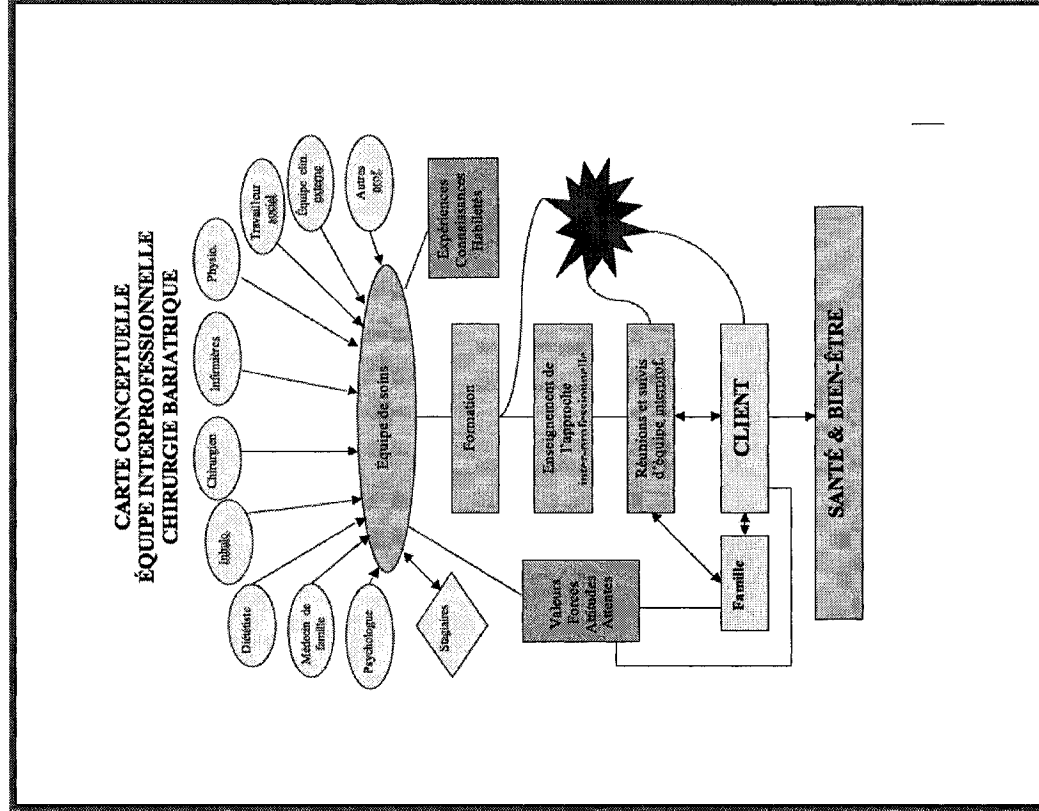
Practices	
82	On va organiser les espaces physiques des gens qui vont travailler là pour favoriser le réseautage... pas juste de dire qu'on a une rencontre par semaine tout le monde ensemble mais, de voir à quel point faire des modifications à l'organisation physique de l'environnement des travailleurs aura un impact sur le travail d'équipe. Sophie We will organise the physical space for people who will work there to favour networking... not just say that we have a meeting together every week but actually seeing the impact the organisation of physical space will have on team functioning. Sophie (Learner interview)
83	Mon approche pour aller chercher des informations, surtout quand vient le temps d'identifier les interventions autres, c'est-à-dire dans les autres disciplines, non-infirmières, sciences infirmières, je vais voir partout dans l'hôpital pour voir quelles sont les perceptions et rechercher qui fait quoi. Vickie My approach to collect information, especially when I need to identify other interventions, other than nursing that is, I go search everywhere in the hospital to see what the perceptions are and to find out who does what. Vickie (Learner interview)
84	Souvent les gens vont dire : « Regarde elle n'est pas ici, elle travaille le mardi, tu reviendras la revoir ». Tu sais ça retranscrit beaucoup alors de représenter : « Regarde on gère le cas ensemble et ensemble on est capable de dire à la famille qu'est-ce qui se passe. » Sophie Often people will say: 'She's not here, she works on Tuesday, so you can come back and see her'. You know, there's a lot of overlap, we must learn to say instead: 'Look we're managing the case together and together we can tell the family what's going on.' Sophie (Learner interview)
85	On a mis sur pieds le code rose pour les nouveaux-nés. Puisque le pédiatre n'était pas toujours sur place, on a formés des urgentologues pour avoir un rôle à jouer jusqu'à la venue du pédiatre. Les infirmières, l'obstétricien, la thérapeute respiratoire et la sage femme sont aussi sur place et il a fallu déterminer de façon très, très claire le rôle de chacun, de chacune dans un code rose. Et non seulement est-ce qu'on a formé tout le monde ensemble de façon interprofessionnelle, mais on a un groupe de trois professionnels de la santé qui font de la formation de simulation code rose... Ça fonctionne à merveille, tout le monde est enchanté, enchanté... Ils ont dit : « On travaille tellement mieux ensemble maintenant, on se connaît bien ». Je vois beaucoup d'effets positifs de ça. Mélanie We developed a code pink for newborns.... Since the paediatricians were not always on site, we trained emergency physicians to cover for them until they arrived. Nurses, obstetrician, respiratory therapist, and midwives were also involved...and we had to determine very clearly the roles of each person in a code pink. Not only did we train everybody together in an interprofessional way but it was a group of three healthcare professionals who provided the code pink training...It worked like a charm and everyone was amazed... They said: 'We work together so much better now, we know each other well'...I see a lot of positive effects of that. Mélanie (Learner interview)

Appendix X: Example of concept maps – Workshop version 1

Sophie



Lise



Appendix Y: Post-workshop reflection (paper format)

Unité 7 : Appliquer les principes de l'enseignement interprofessionnel dans son milieu de travail Réflexion post-atelier

	Tout à fait d'accord	Plutôt d'accord	Plutôt en désaccord	Tout à fait en désaccord
1) Le travail interprofessionnel est le partage des progrès du patient avec l'équipe de soins.			X	
Informar les autres intervenants de nos progrès relève plutôt du travail multidisciplinaire. Le travail interprofessionnel implique un processus de discussion et de négociation pour arriver à des buts communs. L'équipe de soins, le patient et sa famille sont inclus dans ce processus de décision.				
2) L'interprofessionalité est menaçante pour l'identité professionnelle.		X		
L'identité professionnelle est liée aux frontières qui nous distinguent l'un de l'autre. Des tâches et responsabilités bien délimitées peuvent être sécurisantes pour le professionnel de la santé. Or le travail interprofessionnel nécessite un partage de tâches et de responsabilités qui varient selon les besoins de chaque patient. Cette incertitude est un des facteurs à l'origine de la menace. Lorsque l'intervenant est à l'aise avec le partage des tâches et souhaite apprendre des autres, l'interprofessionalité n'est plus perçue comme une menace à l'identité professionnelle mais fait partie d'une nouvelle identité.				
3) L'interprofessionalité pose certains défis légaux aux ordres professionnels.	X			
Les ordres professionnels s'efforcent à fixer des balises immuables quant au champ de pratique de chacune des professions réglementées au Canada. Selon l'approche interprofessionnelle il est question d'éduquer tous les intervenants à participer au plan de traitement proposé et ceci demande un partage des tâches et de responsabilités. Ce partage pose des problèmes au niveau de la responsabilité légale qui incombe à chaque professionnel pour les actes posés. Le discours légal de l'heure propose que l'éthique professionnelle prime dans une telle situation. Le partage de la responsabilité pour le bien-être du patient est plus important que de déterminer qui devrait avoir la responsabilité première pour les actes posés.				
4) La collaboration consiste en la division et l'assignation des tâches à chaque membre de l'équipe pour rencontrer l'objectif commun.				X
C'est l'approche coopérative qui nécessite une division des tâches. Il peut y avoir coopération sans qu'il y ait collaboration. La collaboration nécessite un partage de responsabilités et un enseignement entre les membres de l'équipe de soins.				
5) Il est difficile d'enseigner l'interprofessionalité à un groupe homogène d'étudiants ou de professionnels de la santé.	X			
Les études démontrent que les professionnels de la santé pensent qu'ils pratiquent l'interprofessionalité alors que les données affichent plutôt des pratiques multiprofessionnelles ou uniprofessionnelles. Une des explications proposées pour cette divergence de perception est la structure de la formation académique qui privilégie un enseignement « au sujet de » l'interprofessionalité plutôt que « de l'expérimenter ». Par exemple un enseignement par cas, en petits groupes de représentants d'au moins quatre disciplines professionnelles différentes est une façon de faire vivre l'interprofessionalité.				
6) Les étudiants sont les ambassadeurs de l'interprofessionalisme et s'ils reçoivent une formation adéquate, ils stimuleront le changement dans			X	

les milieux de soins.				
A date les études démontrent que les étudiants qui sont formés à l'interprofessionnalité dans leur programme académique sont plus réceptifs à cette façon de faire dans le milieu de travail. Toutefois, ces nouveaux diplômés adoptent les pratiques du milieu qui les embauche. Il faut donc former les intervenants également.				
7) Les efforts d'un seul individu dans un milieu de soins n'auront pas beaucoup d'impact sur le virage vers l'interprofessionnalité.		X		
Selon le modèle de Santé Canada, les stratégies de changements doivent s'opérer à plusieurs niveaux en même temps: la motivation des paliers supérieurs des gouvernements, une structure adéquate des programmes académiques, la formation des professeurs, un appui des dirigeants des établissements de soins, une structure organisationnelle appropriée, des intervenants formés, etc. Faut-il encore un champion pour semer la graine de l'interprofessionnalité peu importe le niveau d'intervention. Toutefois la stratégie de cet individu doit miser sur l'implication de d'autres personnes.				
8) La volonté à collaborer, la confiance mutuelle, la communication et le respect déterminent le niveau d'adhésion à l'interprofessionnalité.	X			
Une analyse des études théoriques et empiriques sur l'interprofessionnalité (San Martin-Rodriguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005) a révélé quatre déterminants interactionnels : la volonté à collaborer, la confiance mutuelle, la communication et le respect. Ces déterminants sont nécessaires au développement et à la consolidation du travail interprofessionnel en milieu de soins.				
9) La pratique de l'interprofessionnalité invite à reconnaître ses propres limites professionnelles en relation avec les besoins globaux du patients, tout en entretenant une relation interdépendante avec les autres intervenants.	X			
Barr (1998) propose huit compétences clés de collaboration nécessaires à la pratique de l'interprofessionnalité. Parmi celles-ci on retrouve : • reconnaître et respecter ses propre limites professionnelles tout en saisissant les besoins du patient dans une perspective globale; • Créer une relation interdépendante avec les autres professionnels.				
10) C'est le virage ambulatoire (clinique externes et soins à domicile) qui a provoqué le mouvement vers l'interprofessionnalité.		X		
Plusieurs facteurs ont contribué au mouvement vers l'interprofessionnalité : la pénurie de professionnels (souligné par l'organisation mondiale de la santé, 1988), la complexité des cas (nécessite l'intervention de plusieurs professionnels), la rationalisation des ressources (besoin de partager les tâches) et le virage ambulatoire (besoin de diminuer les séjours dans les hôpitaux et de coordonner les ressources).				

2006-03-10

Appendix Z: Narration of the six steps for developing a conceptual map

Le développement d'une carte conceptuelle Narration pour accompagner l'animation Activité préparatoire 2.3

Voici une série de 6 étapes séquentielles à suivre pour vous aider à créer une conceptuelle. Vous pouvez revenir en arrière à l'une ou l'autre des étapes à tout moment.

Étape 1 : Identifier le but (pause)

- Ici il s'agit de préciser le but de votre participation à cette formation et de l'écrire. Est-ce que vous avez comme projet d'améliorer une approche que vous utilisez actuellement? Ou voulez-vous lancer un projet nouveau? Il est à noter que votre but pourra se préciser au fur et à mesure que vous développerez votre carte conceptuelle.

Étape 2 : Élaborer un champ sémantique (pause)

- Faites un remue-méninges des idées et des acteurs clés en lien à votre point de départ, soit votre but personnel. Débutez en lisant les ressources suggérées et en participant aux activités de l'atelier. Notez tout de suite les idées qui émergent de vos lectures et discussions.

Étape 3 : Déterminer les thèmes (pause)

- Regroupez les idées similaires ensemble pour créer des thèmes.

Étape 4 : Créer des sous-systèmes (pause)

- Regroupez les thèmes qui sont liés pour former des catégories. Celles-ci constituent souvent la trame de fond de la carte conceptuelle.
- Utilisez des carrés, des cercles, des triangles, des boîtes et des diagrammes de Venn pour illustrer les catégories.

Étape 5 : Établir des liens (pause)

- Réunir vos catégories à l'aide d'un diagramme. Illustrez les liens ou le chevauchement entre elles. Utilisez entre autres des flèches, des lignes, des spirales ou des zones ombrées.
- L'ordre dans lequel les catégories sont disposées est aussi important. Notez s'il y a des facteurs temporels qui entrent en jeu. Intégrer tous ces concepts dans votre carte conceptuelle.
- Permutez les diverses composantes du diagramme au besoin. Il vous faudra plusieurs essais avant d'obtenir une carte conceptuelle logique et bien structurée.

Étape 6 : Analyser votre carte et élaborer un plan d'action (pause)

- Analysez votre carte conceptuelle et identifiez les points sur lesquels vous pouvez agir. Élaborez un plan pour atteindre le but que vous vous êtes fixé au départ.

Appendix AA

Revised workshop

The following ten changes were made for the second iteration of the IECPCP eLearning workshop:

1. Separate the CPCP content from the concept map activity.
2. Devise workshop titles that indicate progression.
3. Offer the workshop at a different time of year.
4. Mediate uneven participation.
5. Review language used in certain areas.
6. Help learners develop “readiness” for learning.
7. Improve usability.
8. Encourage learners to self-evaluate.
9. Encourage learners to interact with each other.
10. Manage learners’ expectations.

The first change was to separate the CPCP content from the concept map activity. The workshop was separated into two six-week workshops, each representing 20 hours of learning. The first workshop covered CPCP content and the second workshop focused on developing an action plan (appendix BB).

The second change was to devise workshop titles that conveyed a sense of progression from one workshop to the next. The titles chosen were:

Série: L’enseignement de pratiques interprofessionnelles dans son milieu de travail

Series: Teaching interprofessional practices in the workplace

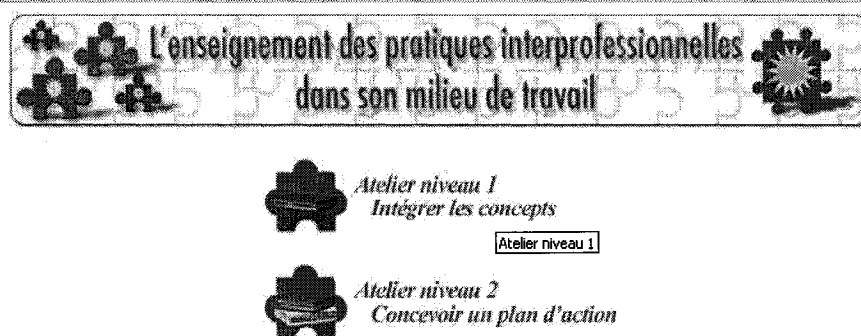
Ateliers - Workshops:

Niveau I – Intégrer les concepts - Level I – Integrating the concepts

Niveau II – Concevoir un plan d’action - Level II – Designing an action plan

Workshop level I was a prerequisite to Workshop level II, affording learners the possibility to choose whether or not they wanted to continue on to the concept map activity (figure 30).

Figure 30: The two levels of the revised workshop series



The third change was to offer the workshop at a different time of year than the time that the original workshop was offered. The workshop series was moved to winter/spring rather than spring/summer. The first workshop, “Level I – Integrating the concepts”, was delivered from January 18 to March 1st, 2007. The second workshop, “Level II – Designing an action plan” started after a one-week break, and was available online from March 8 to April 19, 2007.

The fourth change was to attempt to mediate uneven participation between workshop level I and level II. Each workshop maintained the same flexible approach to learning offered in the first version of the workshop, that is learners were provided with a calendar of events as a guide (appendix CC) and could choose to participate in the workshop activities at their own pace. One exception was that once learners completed the desired activities in workshop level I, they could not continue with workshop level II until the advertised date. This ensured that learners would have the opportunity to discuss the progress of their concept map at the same relative stages during the second six-week workshop.

The fifth change was to review the language used to describe how to develop a concept map and an action plan. The focus of the second workshop was placed on devising an action plan using the steps for developing a concept map as a tool. The use of the word “concept map” was used parsimoniously throughout the content pages and was often replaced by words like “drawing” or “illustration”. The titles for each step presented the terminology found in the literature on concept mapping and were always accompanied by a simplified version of each term throughout the workshop (figure 31).

The sixth change was to help learners develop their level of readiness for learning through concept mapping. The activities for both workshops in the interprofessional series were outlined on the CNFS website and registration form, in the advertisement brochure, at the beginning of the workshop level I, and in the calendar of events. This approach was devised with the expressed purpose of giving learners time to contemplate whether or not they wanted to continue with workshop level II.

The seventh change was to improve usability. The table of content was modified so that all topics covered in each unit were explicitly named. Separating the parallel structure of CPCP content followed by action planning simplified the web pages and also reduced the number of discussion forums in each workshop (level I and level II) (figure 32).

The eighth change was to encourage learners to self-evaluate. Information was added to the introduction page of both workshops to explain why learners should self-evaluate and how they should conduct this activity. Learners were encouraged to read the unit objectives, to compare the objective with what they thought they had learned, and to discuss any gaps with the facilitator. Learners were also encouraged to complete the pre- and post-workshop reflection. In fact, learners were instructed that completing the post-workshop reflection was required to access to workshop level II (figure 33).

Figure 31: Language used for the concept map – revised workshop

Atelier niveau II: Concevoir un plan d'action

Prêt à continuer!



Étapes à suivre

Pour concevoir un plan d'action bien articulé qui stimule les pratiques interprofessionnelles, il est nécessaire de bien analyser son milieu de travail. Une manière efficace d'y arriver est d'illustrer nos idées par rapport au sujet. C'est ce qu'on appelle une carte conceptuelle.

Une fois la carte terminée, elle met en relation les idées, les acteurs et les autres variables qui entrent en jeu. Vous vous en servirez pour cibler et prioriser les actions que vous voulez prendre pour stimuler les pratiques interprofessionnelles dans votre milieu.

Il s'agit d'un exercice de réflexion qui comporte plusieurs étapes avant d'en arriver à un produit logique et cohérent. C'est pourquoi ce travail s'échelonnnera sur 6 semaines. Nous vous invitons à vous inspirer des activités d'apprentissage incluses dans l'atelier « niveau I - Intégrer les concepts » et des échanges avec vos collègues dans les forums de discussion pour vous aider à illustrer votre carte et concevoir votre plan. Ce qui importe, c'est que votre travail soit spécifique à vos besoins.

Ce qui suit est une animation des **six** étapes à suivre pour vous aider à créer votre schéma; ce que nous appelons « carte conceptuelle ».

Qu'est-ce qu'une carte conceptuelle ?



Ce que vous aurez à produire au cours des 6 prochaines semaines

Pour vous aider à concevoir votre schéma (carte conceptuelle), nous avons choisi un sujet simple. Nous avons créé une carte conceptuelle avec l'histoire des trois petits cochons. Au besoin, [cliquez ici pour lire un résumé de l'histoire](#).

Nous ferons le lien avec la carte conceptuelle que nous avons créé pour l'histoire des trois petits cochons à chaque unité. Vous pourrez ainsi voir comment nous nous y sommes pris pour faire évoluer notre carte conceptuelle.

Voici l'évolution de notre carte conceptuelle de l'histoire des trois petits cochons qui sera utilisée dans toutes les unités de l'atelier.

1. **Identifier le but** - C'est à dire déterminer le changement que vous souhaitez dans votre milieu.
2. **Élaborer un champ sémantique** - C'est-à-dire faire un remue-méninges de tous les éléments qui entrent en ligne de compte.
3. **Déterminer les thèmes** - C'est-à-dire le regroupement des idées similaires.
4. **Créer des sous-systèmes** - C'est-à-dire le remaniement des idées sous forme de catégories.
5. **Établir des liens** - C'est-à-dire faire le dessin de la carte.
 - a. **Une des premières versions à la main**
 - b. **Version schématisée**
 - c. **Version finale, revue par notre graphiste**

Veuillez noter que dans le cadre de cet atelier, nous nous attendons à ce que vous produisiez une carte conceptuelle qui se situe au niveau des exemples a. ou b. L'exemple c. a été préparé à des fins d'enseignement.

Une fois complétée, la carte devra être analysée, ce qui vous permettra de prioriser les actions à prendre.

6. **Concevoir un plan d'action** - C'est-à-dire une analyse de la carte pour déterminer où vous pouvez agir.

Objectifs

Visionner les étapes de production d'une carte conceptuelle pour aider à concevoir un plan d'action.

Calendrier

Semaine 8

du 8 au 15 mars

**Figure 32: Table of content – revised workshop
Workshop – Level I**

Table des matières

Prêt à commencer!

Unité 1: Rôles et responsabilités

Unité 2: Le mouvement vers l'interprofessionnalisme; Les concepts de collaboration, de coopération, de multi, inter et trans professionnalisme

Unité 3: La formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP)

Table des matières

on des projets

Prêt à continuer!

Unité 1: Préciser le but

Unité 2: Faire un remue-méninge

Unité 3: Regrouper les idées par thème

Unité 4: Créer les sous-systèmes

Unité 5: Dessiner la carte conceptuelle et la décrire

Unité 6: Prioriser les actions à prendre

Figure 33: Configuration of pre- and post-workshop reflection – revised workshop



* Il est nécessaire de compléter la *Réflexion post-atelier* afin d'accéder à l'atelier
«Niveau 2- concevoir un plan d'action» *

The ninth change was to encourage learners to interact with each other. In their registration package, learners were given information explaining why they should consider engaging other learners in online discussions. This information was also posted on the introduction page of workshops levels I and II (figure 34). As the facilitator for the revised workshop, I also posted a relevant new “tip of the week” at the end of each unit to help learners manage the volume of postings and use the discussion forum more efficiently.

The tenth change was to better manage learners' expectations. The workshop's introduction page, as well as promotional materials, were rewritten and reformatted so that key information such as workshop objectives and estimated workload were emphasised (figure 34). Information posted in the discussion forum clearly outlined the expectations of each activity. For example, in workshop level II, I provided an anonymous example in the discussion forum of how another learner in the original workshop chose to complete the concept map activity.

The workshop series was advertised beginning January 8, 2007 and workshop level I was scheduled to begin ten days later. Thirty-seven healthcare providers registered in the workshop series and 30 learners logged on to the website between one to seven days after the workshop started. Most learners participated in the discussion forum, 27 learners read messages, and 25 learners posted messages. A total of 180 messages were posted in the discussion forum for workshop level I. Sixteen learners completed most or all of the workshop activities within the six-week time frame and an extension was not requested. Because the revised workshop was not included in the intrinsic case study, post-workshop surveys and interviews were not conducted, therefore a more in-depth analysis is needed to gain a better understanding of the learners' experience. Course records show that there was more discussion between the learners in the revised workshop, and this was reflected in an increased number of postings (well over 50 on some weeks). At the end of the last unit, learners posted positive messages in the discussion forum about the usefulness of workshop level I.

Of the 16 learners who completed workshop level I, nine learners decided to continue with workshop level II. Two learners from the original 2006 workshop also registered for workshop level II, although they cancelled before it started. Eight of the nine learners developed the concept map and devised a workplace specific action plan (appendix DD). The ninth learner introduced herself in the discussion forum but did not log on to the website thereafter. Two learners worked at the same clinical site and decided to develop their concept map and action plan together.

The facilitation strategy changed for this workshop. Because learners were working on individual assignments, I provided prompt feedback on their drafts within 48 hours. All active participants (n=8) communicated extensively in the discussion forum and posted a total of 141 messages. Learners shared what they had produced at each step of concept mapping and also shared their action plan. The interaction in the discussion forum was mostly with me (the facilitator), and consisted of learners asking for feedback on their drafts, although learners did encourage each other throughout the process. Learners provided positive feedback at the end of the workshop, and many posted messages indicating they had already taken steps to implement their plans.

The revised workshop series received the 2007 CADE/AMTEC award for excellence in instructional design in recognition for its innovation in online continuing education. At this time, the workshop series continues to be offered by the CNFS and learners from the original workshop, and more from the revised workshop still communicate with me for suggestions and advice on the implementation of their action plan. Numerous requests have also been made to offer the workshop series in a f2f format or as an eLearning model at various scholarly events.

Figure 34: Introduction pages – revised workshop

L'enseignement des pratiques interprofessionnelles dans son milieu de travail

Avant de commencer

Présentation des ateliers

Bienvenue

Rencontrez l'équipe de formatrices du CNFS qui a conçu cette série d'ateliers.

Calendrier

Voici un calendrier détaillé des activités pour cet atelier

Description

Objectif général de la série et compétences visées:

L'objectif général de cette série d'ateliers est d'apprendre comment stimuler et enseigner les pratiques interprofessionnelles.

La compétence visée à l'atelier de niveau I est :

- Intégrer les concepts associés à l'enseignement des pratiques interprofessionnelles.

La compétence visée à l'atelier de niveau II est :

- Stimuler et d'enseigner les pratiques interprofessionnelles dans son milieu de travail. Pour ce faire, vous serez amené à concevoir un schéma illustrant les variables qui influencent le travail interprofessionnel dans votre milieu.

Cette série cible les professionnels de la santé engagés dans la formation des étudiants ou des collègues de travail, les administrateurs, les chefs d'équipe ou tout autres professionnels intéressés à stimuler le travail interprofessionnel dans son milieu. L'enseignement selon les principes de l'interprofessionnalisme suppose un travail de réflexion individuelle et d'autoapprentissage. De plus, pour apprendre, il est nécessaire de partager ses réflexions avec l'ensemble du groupe. Par conséquent le participant sera appelé à discuter, lire, paraphraser et défendre ses idées en utilisant une communication efficace.

Chacun des ateliers de cette série est d'une durée de 6 semaines. Nous estimons que les activités d'apprentissage prévues sur le site WebCT nécessiteront un total de 20 heures de travail par atelier. Toutefois, une période de temps moindre ou supplémentaire peut s'avérer nécessaire, selon les besoins personnels de chaque participant.

Pour vous aider à maîtriser la matière enseignée et à l'appliquer dans votre contexte de travail, l'environnement de classe WebCT comportera des activités animées et interactives. Il y aura des textes, des débats, des histoires de cas et des modèles. L'interaction, le partage et la discussion avec la formatrice et avec les autres participants sont donc indispensables au processus d'apprentissage.

****Veuillez noter que le niveau I est préalable au niveau II.**

Objectifs

Prendre connaissance du but de la série d'atelier.

Se familiariser avec les modalités d'enseignement du cours.

Calendrier

Semaine 1

du 19 au 25 janvier

Échéanciers proposés pour la série

Niveau I - Intégrer les concepts

19 janvier - 1er mars

Niveau II - Concevoir un plan d'action

9 mars - 19 avril

Thématiques abordées au cours de la série

Au cours de cette série d'ateliers, les apprenants exploreront les thèmes suivants :

Atelier de niveau I - Intégrer les concepts

- identité et frontières professionnelles
- terminologie et définitions du travail en collaboration
- événements clés et mouvement vers l'interprofessionnalisme
- caractéristiques de la formation interprofessionnelle

Goal of of the workshop series and associated competencies for each workshop

Estimated workload

Expectation regarding interaction

Topics covered in workshop I

- étapes à suivre pour créer un plan
- identification des variables clés
- illustration des liens entre les variables
- évaluation des actions à prioriser
- mise en œuvre du plan

Topics covered in workshop II



Documents obligatoires et lectures suggérées

Webographie

Au cours de l'atelier, vous constaterez que nous avons consulté de nombreuses références. Celles-ci vous sont transmises à titre d'information pour ceux qui veulent parfaire leurs connaissances. Cependant pour atteindre les objectifs de la formation, nous avons ressorti quatre références essentielles :

1. Lien au site web au sujet de la FIPCCP de Santé Canada

http://www.hc-sc.gc.ca/hcs-sss/hhr-rhs/strateg/interprof/index_f.html

2. Chapitre 10. Formation interprofessionnelle pour une pratique en collaboration centrée sur le patient : un cadre conceptuel évolutif :



Critères d'achèvement et de réussite

Les ateliers de formation du CNFS s'appuient sur les principes de l'évaluation formative. La formatrice de l'atelier vous fournira une rétroaction ciblée sur vos apprentissages tout au long de l'atelier. Deux plus, deux réflexions vous sont proposées dans la section « Contenu et activités » pour vous aider à faire le bilan de vos connaissances. Ces réflexions sont formatives et aucun score n'y est attribué.

Vous devez compléter la « réflexion pré-atelier » lors de la première semaine. Ces mêmes questions vous sont proposées lors de la « réflexion post-atelier » à la dernière semaine de chacun des ateliers. Vous pourrez ainsi comparer vos réponses et constater la progression de vos connaissances. Par ailleurs, une rétroaction vous est fournie, pour chacune des questions, lors de la « réflexion post-atelier ». **Veillez noter que pour accéder à l'atelier « niveau II- concevoir un plan d'action », il est nécessaire de compléter la réflexion post atelier de l'atelier « niveau I - intégrer les concepts ».**

Invitation to complete the pre- and post-workshop survey

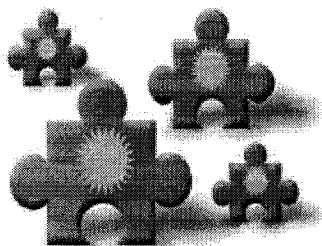
Pour l'atelier niveau I:

Pour tirer profit des activités prévues, il est nécessaire de participer activement aux discussions avec les autres participants avec votre formatrice en essayant de répondre aux questions posées sous l'icône « Réflexion » à chacune des unités. Cette réflexion est nécessaire pour vous aider à intégrer les concepts.

Pour l'atelier niveau II:

Vous aurez à produire un schéma pour illustrer les variables qui entrent en jeu pour stimuler ou enseigner les pratiques interprofessionnelles dans votre milieu. C'est à partir de ce schéma que vous concevrez votre plan d'action. Pour compléter ce travail de réflexion avancé, il est nécessaire de partager et commenter les ébauches des documents qui sont produits.

Explanation about why they should interact with other learners in the discussion forum



INSCRIPTION EN LIGNE

Inscrivez-vous dès maintenant !
www.cnfs.ca/uOttawa

D'une durée de 6 semaines et équivalant à 20 heures de travail chacun, les ateliers « Niveau I - Intégrer les concepts et Niveau II - Concevoir un plan d'action » est une activité unique offerte en français. Une équipe interprofessionnelle a développé ces ateliers dans le cadre des activités du Consortium national de formation en santé (CNFS) à l'Université d'Ottawa.

LE CONSORTIUM NATIONAL DE FORMATION EN SANTÉ

L'Université d'Ottawa est l'un des dix partenaires universitaires et collégiaux qui constituent le Consortium national de formation en santé (CNFS).

Le CNFS vise à améliorer l'accès à de la formation en français dans différentes disciplines de la santé et de contribuer au développement de la recherche en santé dans les communautés francophones en milieu minoritaire au pays.



des pratiques interprofessionnelles dans son milieu de travail

*Une nouvelle série d'ateliers
développée à l'intention des professionnels
de la santé intéressés à stimuler
le travail interprofessionnel
dans leur milieu*



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*Ce projet a été rendu possible grâce à une contribution
financière provenant de Santé Canada.*

« L'enseignement des pratiques interprofessionnelles dans son milieu de travail »

ENRICHISSEMENT PROFESSIONNEL

Une série d'ateliers développée par des professionnels de la santé et disponible à distance par Internet, donc flexible et facilement accessible.

- animation par un professionnel de la santé
- activités interactives
- en français
- accessible à distance
- flexible
- gratuit

« L'enseignement des pratiques interprofessionnelles dans son milieu de travail »

Niveau I - Intégrer les concepts

Dans cet atelier, vous aurez l'occasion de définir les termes et les concepts, puis de traiter de l'utilité des pratiques interprofessionnelles, des défis et des stratégies d'implantation.

Niveau II - Concevoir un plan d'action*

Dans cet atelier, vous serez amené à créer un plan d'action individualisé pour enseigner et stimuler les pratiques interprofessionnelles. Ce plan tiendra compte des écrits récents.

* Le niveau I est un préalable à cet atelier.

OBJECTIF

L'objectif général de cette série d'ateliers est d'apprendre comment stimuler et enseigner les pratiques interprofessionnelles. L'objectif de l'atelier de niveau I est d'intégrer les concepts associés à l'enseignement des pratiques interprofessionnelles. L'objectif de l'atelier de niveau II est de concevoir un schéma illustrant les variables qui entrent en jeu pour stimuler et enseigner les pratiques interprofessionnelles dans son milieu de travail.

PROFIL DU PARTICIPANT

Le participant sera un professionnel de la santé engagé dans la formation des étudiants ou des collègues de travail, un administrateur, un chef d'équipe ou tout autre professionnel intéressé à stimuler le travail interprofessionnel dans son milieu.

L'enseignement selon les principes de l'interprofessionnalisme suppose un travail de réflexion individuelle et d'auto-apprentissage. De plus, pour apprendre, il est nécessaire de partager ses réflexions avec l'ensemble du groupe. Par conséquent le participant sera appelé à discuter, lire, paraphraser et défendre ses idées en utilisant une communication efficace.

THÈMES CIBLÉS

Au cours de cette série d'ateliers, les apprenants explorent les thèmes suivants :

Atelier de niveau I - Intégrer les concepts

- identité et frontières professionnelles
- terminologie et définitions du travail en collaboration
- événements clés et mouvement vers l'interprofessionnalisme
- caractéristiques de la formation interprofessionnelle

Atelier de niveau II - Concevoir un plan d'action

- étapes à suivre pour créer un plan
- identification des variables clés
- illustration des liens entre les variables
- évaluation des actions à prioriser
- mise en œuvre du plan

Appendix CC – Calendar of events: Revised workshop

L'enseignement des pratiques interprofessionnelles dans son milieu de travail

Date suggérée	Sections (s)	Objectif(s) visé(s)	Activités d'apprentissage / Médias
Objectif général de la série : Apprendre comment stimuler et enseigner les pratiques interprofessionnelles dans son milieu de travail			
Avant de commencer : Préparer son ordinateur			
Du 18 au 25 janvier 2007	Vérification technique	Préparer son ordinateur.	- Activer l'outil du campus virtuel : <i>Sonder votre ordinateur</i> - Télécharger les plugiciels
Avant de commencer : Présentation des ateliers			
Du 18 au 25 janvier 2007	Description de l'atelier	- Prendre connaissance du but de l'atelier - Se familiariser avec les modalités d'enseignement du cours	- Capsule vidéo : Présentation des coordonnatrices - Calendrier des activités - Description et objectif de la série d'ateliers - Thèmes abordés dans chacun des deux ateliers - Lectures suggérées - Critères d'achèvement et de réussite
Atelier Niveau I – Intégrer les concepts			
Compétence visée : Intégrer les concepts associés à l'enseignement des pratiques interprofessionnelles			
Réflexion pré-atelier (Quiz)			
Prêt à commencer!			
Du 18 au 25 janvier 2007	Introduction à l'atelier	Se présenter à la classe virtuelle.	- Capsule vidéo : Introduction à l'atelier - Échanges (forum) : Présentation et discussion d'expériences vécues
Unité1 : Rôles et responsabilités			
Du 25 janvier au 1 ^{er} février 2007	Rôles et responsabilités	- Expérimenter une stratégie pour apprécier les rôles et responsabilités de chacun. - Discuter des stratégies pour aider les étudiants ou les collègues à être sensibles aux rôles et responsabilités de chacun.	- Lire la page Web : Rôles et responsabilités - Activités (2) : Connaissances des rôles et responsabilités - Échanges (forum) : Discussion au sujet des stratégies pour amener les autres à discuter de leurs rôles ou responsabilités
Unité 2 : Le mouvement vers l'interprofessionalisme; Les concepts de collaboration, de coopération, de multi, inter et trans professionalisme			
Du 1 ^{er} février au 8 février 2007	Le mouvement vers l'interprofessionalisme	Prendre consciences du mouvement vers l'interprofessionalisme	Lire la page Web : Mouvement vers l'interprofessionalisme
	La collaboration et la coopération	Distinguer entre la notion de collaboration et de coopération	- Lire la page Web : Collaboration et coopération - Animation : Collaboration et coopération - Exemple : Collaboration et coopération - Activité : Passer de la coopération à la collaboration

	Les approches multi, inter et trans professionnelle	▪ Critiquer les approches multiprofessionnelle, interprofessionnelle et transprofessionnelle	▪ Lire la page Web : Approches multi, inter et trans professionnelle ▪ Animation : Approches multi, inter et trans professionnelle ▪ Activité : Distinguer entre la notion multi, inter et trans professionnelle ▪ Capsules vidéo : Exemple d'une approche multi, inter et trans professionnelle ▪ Échanges (forum) : Discussion au sujet des capsules vidéo et partage d'exemples
Unité 3 : La formation interprofessionnelle pour une pratique en collaboration centrée sur le patient (FIPCCP) : Définition et modèle			
<i>Du 8 février au 15 février 2007</i>	Définition, historique et évolution des concepts	▪ Situer la FIPCCP dans le contexte national et international	▪ Lire la page Web ▪ Animation : documents marquants
	Modèle de la FIPCCP	▪ Préciser les liens à créer dans mon milieu de travail d'après les composantes du modèle de la FIPCCP	▪ Animation (2 versions) : Modèle FIPCCP ▪ Document : Description du modèle (chapitre 10) ▪ Lire la page Web : trois autres modèles ▪ Exemple : Comment se situer dans le modèle de la FIPCCP ▪ Échange (forum) : Partage de la réflexion individuelle au sujet de comment se situer dans le modèle
Unité 4 : Identité professionnelle; Éléments facilitateurs et obstacles à la FIPCCP			
<i>Du 15 février au 22 février 2007</i>	Identité professionnelle	▪ Reconnaître sa capacité à influencer les apprenants face à leur identité professionnelle dans le contexte de la FIPCCP	▪ Lire la page Web : Identité professionnelle ▪ Capsules vidéo : Identité professionnelle ▪ Échanges (forum) : Discussion au sujet des capsules vidéo
	Les éléments facilitateurs et les obstacles à la FIPCCP	▪ Analyser l'importance des éléments facilitateurs et des obstacles pour implanter la FIPCCP	▪ Lire page Web : éléments facilitateurs et obstacles ▪ Document : Lahey et Currie, 2005 ▪ Activité : éléments facilitateurs et obstacles pour chacune des composantes du modèle de la FIPCCP ▪ Échanges (forum) : Discussion des éléments facilitateurs et obstacles dans son milieu de travail
Unité 5 : Compétences clés, domaines d'apprentissage et déterminants associés à la FIPCCP			
<i>Du 22 février au 1^{er} mars 2007</i>	Compétences clés, domaines d'apprentissage et déterminants associés à la FIPCCP	▪ Ressortir les compétences clés de la collaboration, les domaines d'apprentissage et les déterminants associés à la FIPCCP	▪ Lire page Web : Compétences clés, domaines d'apprentissage et déterminants associés à la FIPCCP ▪ Capsules vidéo : Exemples d'histoires de cas problématiques ▪ Document : Grille réponse aux capsules vidéo ▪ Échanges (forum) : Partage des pistes de solution

	Évaluation des projets	Reconnaître l'importance d'évaluer les projets de la FIPCCP	- Lire page web : Évaluation des projets - Documents: PÉE et ÉRAI - Capsules vidéo : Exemples d'histoires de cas problématiques (Unité 5) - Échanges (forum) : Proposer une modalité d'évaluation pour chacune des capsules vidéo
Réflexion post-atelier Niveau I (Quiz)			
Atelier Niveau II – Concevoir un plan d'action			
Compétence visée: Concevoir un plan pour stimuler et enseigner les pratiques interprofessionnelles dans son milieu de travail			
Réflexion pré-atelier Niveau II (Quiz)			
Prêt à continuer!			
<i>Du 8 mars au 15 mars 2007</i>	Les étapes à suivre	Visionner les étapes de production d'une carte conceptuelle	- Lire la page Web : Les étapes à suivre - Animation : Qu'est-ce qu'une carte conceptuelle - Animation : Exemple d'une carte conceptuelle avec l'histoire des trois petits cochons
Unité 1 : Préciser le but			
<i>Du 8 mars au 15 mars 2007</i>	Étape 1	Déterminer le but pour sa carte conceptuelle	- Animation : 1^{ère} étape - déterminer le but - Échanges (forum) : Partage du but de la carte conceptuelle de chaque participant
Unité 2 : Faire un remue-méninges (champ sémantique)			
<i>Du 15 mars au 22 mars 2007</i>	Étape 2	Élaborer un champ sémantique pour sa carte conceptuelle.	- Animation : 2^e étape – élaborer le champ sémantique - Échanges (forum) : Partage du champ sémantique de chaque participant
Unité 3 : Regrouper les idées par thèmes			
<i>Du 22 mars au 29 mars 2007</i>	Étape 3	Regrouper les idées de la carte conceptuelle par thèmes	- Animation : 3^e étape – regrouper les idées par thèmes - Échanges (forum) : Partage des thèmes de chaque participant
Unité 4 : Créer des catégories de thèmes (sous-systèmes)			
<i>Du 29 mars au 5 avril 2007</i>	Étape 4	Créer les sous-systèmes de la carte conceptuelle	- Animation : 4^e étape – créer les sous-systèmes - Échanges (forum) : Partage des sous-systèmes de chaque participant
Unité 5: Dessiner la carte conceptuelle et la décrire (liens)			
<i>Du 5 avril au 12 avril 2007</i>	Étape 5	Créer des liens entre les sous-systèmes de la carte conceptuelle	- Animation : 5^e étape – établir des liens pour compléter la carte - Exemple d'une carte complétée et du paragraphe descriptif - Échanges (forum) : Partage de la carte conceptuelle et du paragraphe descriptif
Unité 6 : Prioriser les actions à prendre (plan de transformation)			
<i>Du 12 avril au 19 avril 2007</i>	Étape 6	Élaborer un plan de transformation pour l'application de la carte conceptuelle	- Animation : 6^e étape – Identifier les points où agir - Échanges (forum) : Partage du plan pour atteindre le but fixé au début de l'atelier
Réflexion post-atelier Niveau II (Quiz)			

Appendix DD: Examples of concept maps: Workshop version 2



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