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Abstract

Adult learners returning to school to complete a secondary diploma are faced with a range of extrinsic and intrinsic factors influencing their ability to engage and commit to their education (Cantor, 1992; Entwisle, Alexander, & Olson, 2004; Klein, Nöe & Wang, 2006). The needs of these adult secondary learners (also known as mature learners) challenge educators to adapt programs to improve learning experiences. One avenue is technology which has changed the face of traditional classrooms at all educational levels (Becker, Ravitz, & Wong, 1999; Dawley, 2008). Particularly, eLearning has been associated with constructivist environments where flexibility and accessibility enhance learning experiences (Kassop, 2003; Johnson, 2001; Neo, 2005). Conversely, eLearning can isolate learners where technological frustration or learning anxiety translate into attrition rates ranging from 30 – 80% (Flood, 2002; King, 2002). Characteristics such as lack of self-directedness and motivation among mature learners suggest that pure eLearning is not ideal (Flood, 2002; Packham, Jones, Miller, & Thomas, 2004; Schrum & Hong, 2002). To support the needs of mature learners, an alternate course modality was explored. Blending classroom and online learning into a hybrid course offered a potential balance for mature learners (Berge, 2006; McCray, 2000; Skill & Young, 2002).

The purpose of this inquiry was to understand the teaching and learning experiences of mature learners and their instructor within a hybrid course. A case study research approach was adopted, and multiple data collection methods helped construct a multifaceted description of the participants' experiences. The findings point to benefits of hybrid learning for mature learners, while also highlighting the skills of the learners and the role of the instructor as influential in the learning experience. The perspectives revealed in this inquiry allow us to envision how hybrid learning could shape a more dynamic learning experience for mature learners.

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Chapter 1: Introduction

The deadline for course registration is approaching and you have the choice of taking a course online or in a classroom. How would you choose how to learn? This question was my motivation for pursuing a master's degree in education with a focus on online and classroom learning. ELearning is prevalent in many post-secondary institutions and a large body of research on the topic exists. However, eLearning is in its formative years within the secondary school system. As an educator and educational researcher, it is important to me that as eLearning continues to grow in this context, changes are directed and supported by relevant research and effective learning theories.

Working professionally within school boards and universities for the past 15 years, I have witnessed the implementation of technology in classrooms simply for innovation's sake and not as a means of meeting the learning objectives. I have seen eLearning courses delivered to the detriment of the learners because they failed to create a positive and successful learning environment. Is this because the courses did not incorporate principles of good practice and were not incorporate sound learning theories? Were the learners not prepared to learn online? Were the learners motivated to learn in this medium? Would a combination of different learning environments maximize learner success?

These questions led me to conduct the present study where adult secondary school learners were provided with the opportunity to learn in both online and classroom environments blended within one course: a hybrid course. For adult secondary school learners, I believed that a hybrid course was suitable and beneficial both by its modified delivery and the opportunity to acquire online learning skills.

Statement of the Problem

Crystina dropped out of school at 16 years old, failing 6 of her 8 classes; absenteeism was listed as a major problem. She is now 19, lives on her own, and works 50 hours a week as a receptionist. She wants to enroll in an esthetics program at a college but needs six more credits to obtain her high school diploma. She therefore enrolled at our adult high school. (Principal, adult high school, personal communication, January 20, 2005).

Crystina's profile represents an underserved population in our education system: adult learners (aged 18-65 years) who return to school to complete their secondary education (Bradley & Goldman, 1996; Cocklin, 1991; Ontario Secondary School Teachers' Federation (OSSTF), 2004; Patterson & Mellard, 2007). The Ministry of Education of Ontario (1999a) applies the term "*mature learner*" to define a "student who is at least eighteen years of age and who has not attended day school for a period of at least one year" (p. 80) and who has returned to school to complete an Ontario Secondary School Diploma (OSSD). The term situates mature learners within the broader adult education (AE) community. The term "*adult secondary education*" (ASE) has been applied when mature learners enroll in an adult day school, evening continuing education courses, or correspondence courses on the Internet to obtain credits towards a secondary school diploma (Comings, Garner & Smith, 2002; Ministry of Education, 2005; Patterson & Mellard). In contrast, "*adult basic education*" (ABE) refers to adults taking courses to build basic literacy or numeracy skills without earning credits towards a diploma (Patterson & Mellard).

Mature learners return to school for a number of reasons: to qualify for a job, to obtain pre-requisite credits for an educational program (i.e., apprenticeship, college, or university), for self-improvement, or to improve language skills (Klein, Nöe & Wang, 2006; Mombourquette,

McEwan & McBride, 1999; Movement for Canadian Literacy (MCL), 2003). They return to school after an absence of months, years, or decades away from an education system (Klein et al.; Rumberger & Lamb, 2003). These learners may have originally been unable to complete high school for a variety of reasons: poor academic standing, parenthood status, lack of engagement in school, or employment opportunities (Bradley & Goldman, 1996; Bushnik, 2003; Entwisle, Alexander, & Olson, 2004; Statistics Canada, 2001a). Personality characteristics, low self-esteem, and demographics (i.e., gender, social or ethnic background) may have contributed to dropping out (Entwisle et al.). The learners may also have undiagnosed learning disabilities, poor study skills, lack of self-regulation, or social and emotional problems (Klein et al.). Moreover, many harbour negative feelings from prior education experiences which influence renewed attempts to return to school (Bradley & Goldman; Rumberger & Lamb). All adult learners, whether engaging in AE, ABE, or ASE, might be juggling parenting or employment responsibilities alongside renewed academic commitments (Bradley & Goldman; Cantor, 1992). Within ASE, the learner's pre-entry attributes such as family life, employment, or learning skills present barriers for pursuing education and often result in high attrition rates (Cocklin, 1991; Ekström, 2003; Dupeyrat & Mariné, 2005). Concurrently, a school setting that does not meet a mature learner's needs can act to decrease his or her persistence in school (Bradley & Goldman). As a result, ASE educators need design and deliver courses that incorporate relevant, meaningful learning experiences. Traditionally, the classroom has been the setting for learning, where face-to-face (F2F) contacts occur among and between learners and instructor; instructors also rely on their collection of familiar teaching strategies. However, traditional classrooms limit flexibility by virtue of rigid course structures and scheduled class times (Gadbow, 2002; Gadbow & Du

Bois, 1998; Klein et al., 2006). An investigation into an alternate course delivery may provide insight into how to establish successful learning experiences for this population.

Technological tools and advancements now present educators with options to transcend the boundaries of a traditional classroom in the quest to offer convenient alternatives and tailor learning for learners (Beldarrain, 2006; Osguthorpe & Graham, 2003; Schacter, 1999). Websites, online modules, learning objects, and software packages have become prevalent in curriculum, training, and continuing education materials (Draves, 2000; Jafari, McGee & Carmean, 2005). Effective eLearning offers a user-oriented, flexible, and convenient medium for learning and increases communication, including greater and timelier feedback for participants (Bonk, Olson, Wisher, & Orvis, 2002; Fox & MacKeogh, 2003; MacDonald & Thompson, 2005).

Effective eLearning should incorporate constructivist principles where authentic and meaningful learning opportunities actively involve learners in their own learning process (Bynner, 2008; Johnson, 2001; Knowles, Holton & Swanson, 1998; Neo, 2005; Rovai & Jordan, 2006; Stodel, Farres & MacDonald, 2005). However, the multi-faceted virtual environment may overwhelm learners who are not self-directed or self-motivated (Bonk et al.; Dede, 1996; Lin, 2008; Nöe, 2005). A combination of online and classroom approaches may provide a viable solution. A hybrid course combines conventional F2F instruction with eLearning (Berge, 2006; Dawley, 2008; Duhaney, 2004; McCray, 2006; Skill & Young, 2002; Willett, 2002). Hybrid courses are emerging as an effective modality which embraces the strengths of virtual and real spaces to meet learners' needs (Kidwell, Freeman, Smith, & Zarccone, 2004; Klein et al., 2006; Pailing, 2002; Skill & Young). In a meta-analytic study, Sitzmann, Kraiger, Stewart, and Wisher (2006) found that a combination of classroom and web-based teaching was more effective than either one alone. Cornelius and Gordon (2008) and Lin (2008) have also made the same claims.

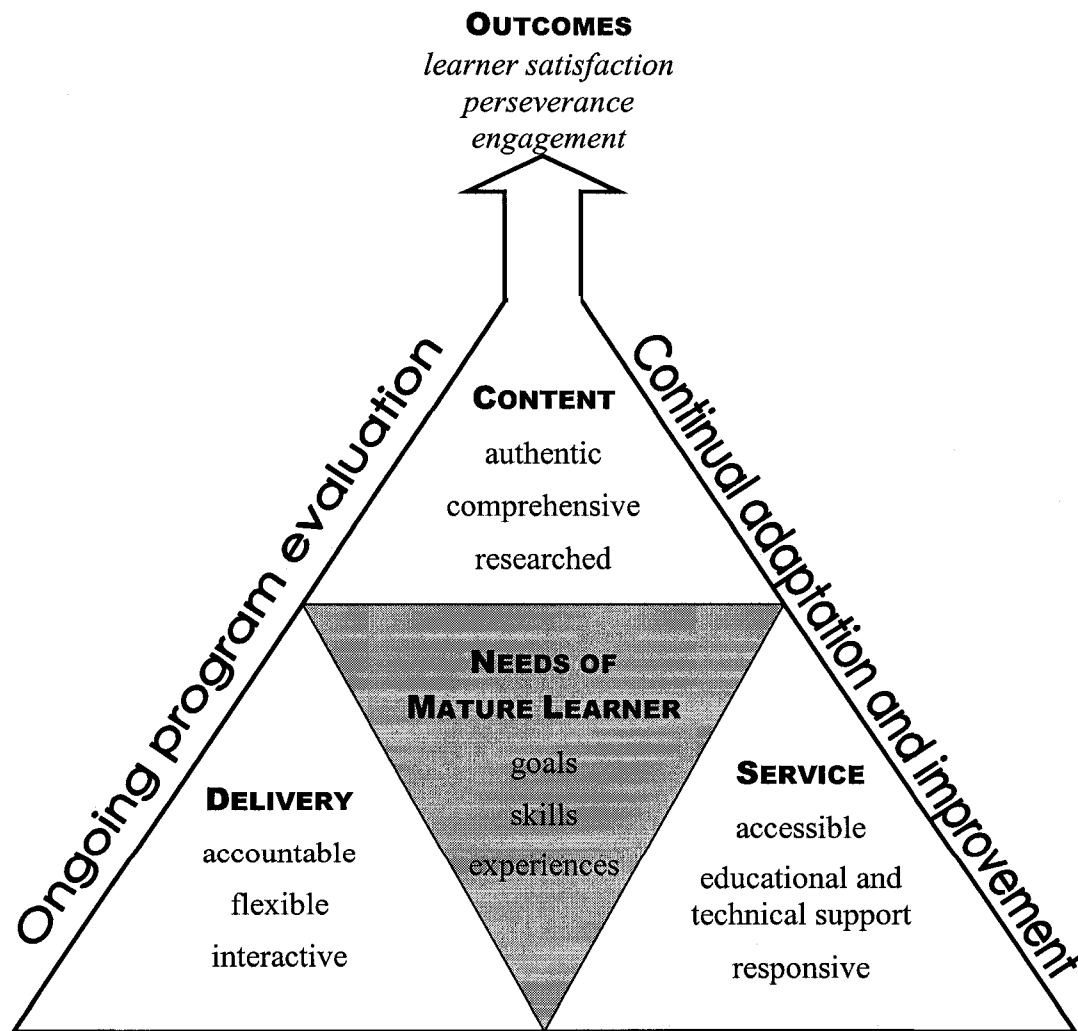
However, these studies were situated in post-secondary institutions. An understanding of the experiences of the mature learners and the instructor within a hybrid course will provide further insight into this emergent modality.

Conceptual Framework

The development and delivery of a hybrid course for mature learners requires effective design and implementation to ensure positive learning outcomes (Gadbow, 2003). A conceptual framework (see Figure 1) was used to guide the development of the hybrid course and the investigation of the learning experiences within it. The conceptual framework incorporated three design and development models: the Demand-Driven Learning Model (DDLM; MacDonald, Stodel, Farres, Breithaupt, & Gabriel, 2001), an instructional development model put forth by Passerini and Granger (2000), and a conceptual framework offered by Klein et al. (2006). The DDLM is an eLearning model designed to meet learner needs within industry (Appendix A). Passerini and Granger's model incorporates both constructivist and objectivist learning paradigms and outlines instructional strategies for the creation or redesign of eLearning courses. The model was intended for content and media designers, instructors, and researchers. In their quantitative study, Klein et al. presented on a conceptual framework depicting course outcomes as a direct result of motivation to learn. These outcomes were described in relation to cognitive and affective learning. Learner and instructional characteristics, along with perceived barriers and enablers influenced motivation to learn. The conceptual framework for this inquiry includes components of the DDLM, phases of the development model, and structures suitable for hybrid learning and the ASE context to influence motivation to learn.

The mature learner is at the core of the conceptual framework for this inquiry. Described as having lower persistence than adult learners, the profile of the mature learner is distinct

(Cocklin, 1991). Previous, and often negative, educational experiences, extrinsic commitments, and a range of personal skills characterize mature learners and necessitate the development of learner-centered programs to engage these learners in the learning process (Bradley & Goldman, 1996; Driscoll, 1998; Klein et al., 2006; Leadership Project, 1995; Ntiri, Schindler, & Henry, 2004). Components of the course must be structured based on the needs and profile of the user population (Passerini & Granger, 2000). A hybrid course must address the *needs* of the mature learner by offering relevant *experiences* connected to their educational *goals* at a level that is suitable for their learning and technical *skills* (Gadbow, 2002).



adapted from Klein et al. (2006), MacDonald et al. (2001), and Passerini & Granger (2000).

Figure 1. Conceptual framework of a hybrid course for mature learners.

Consistent with the DDLM, three key constructs combine to optimize learner outcomes: delivery, content, and service. These constructs blend technology, pedagogy, and organizational support (Kaplan, 2002; Yoon, 2003). In this context, high-quality content, whether online or F2F, is considered to be *authentic* to the learners when it connects to their own realities, *comprehensive* when it meets Ontario curriculum expectations, and *researched* when it incorporates effective pedagogical learning strategies (Holton, Coco, Lowe & Dutsch, 2006; Johnson & Aragon, 2003; Kahn & Lindquist, 2005).

The balance between eLearning and F2F strategies is directed towards keeping the learner *accountable* for their own learning as the course progresses. A combination of scheduled and unscheduled course hours allows learners greater *flexibility* in accessing necessary materials and resources. Teaching *tools* are selected to accomplish learning objectives and incorporate a range of pedagogical strategies, with careful consideration of the advantage and limitation of each tool (Berge, 2000; Milne, 2006). The careful structuring of instruction in both virtual and F2F components into clear sections—such as introduction, presentation of information, practice, and consolidation—provides the learner with a sense of continuity. The structure is intended to enhance *interactivity* with the course material, other learners, and the course instructor (Driscoll, 1998; Lin, 2008).

Within this framework, high-quality service is defined as providing necessary resources required for learning, whether educational or technical in nature (MacDonald et al., 2001; Patterson, 2008). This ensures that learners can efficiently *access* the *course instructor* or *technical support* in a straightforward and timely manner to solve any educational or technological challenges that may arise during the learning process (Patterson & Mellard, 2007; Yoon). In return, learners receive timely quality feedback from the course instructor and the

online software to encourage both skill and knowledge development. Individuals providing both educational and technical support must be freely available and trained or qualified to respond to learners with the ultimate goal of maintaining a positive learning environment for the learners (Packham, Jones, Miller & Thomas, 2004; Patterson, 2008; Sparrow, 2004). Ongoing and continuous improvement of the course requires input and reflection from the learners and the course instructor. The course is reviewed in a formative and summative manner and adapted as necessary to improve both instruction and more importantly, learner outcomes.

In the present study, the institution intended to deliver a course in the alternative hybrid learning modality as a potential strategy to improve learning for the mature learners in their school. A learner's *satisfaction* with a course reflects their reaction to the course in terms of its pace, format, organization, and content (Klein et al., 2006). In satisfying learners' needs and goals, the hybrid course could maintain or improve their motivation to *persevere* in their course of study (MacDonald & Thompson, 2005). The more motivated the learner, the more time and cognitive effort they allocate to *engagement* with their learning process (Klein et al.).

Definition of Terms

The reader may benefit from the clarification of a number of terms that are used in this thesis. *ELearning* refers to learning that takes place over the Internet. *Web-based learning* or *online learning* are other terms used to describe this type of learning. ELearning often incorporates course management systems (e.g., BlackBoard, WebCT, or Desire2Learn) that include features such as discussion forums, chat groups, whiteboards, learner homepages, email, or document sharing systems (Caruso, 2006; Martins & Kellermans, 2004). Learners access the learning environment and course materials or tasks, as well as communicate with other learners and their instructor, through the course management system (Yoon, 2003). Web-based

communication can occur in a *synchronous* (real-time) or *asynchronous* (time-delayed) manner. *Hybrid learning* refers to learning that combines eLearning and F2F sessions to facilitate instruction and learning (Cornelius & Gordon, 2006; Duhaney, 2004). The manner in which F2F and eLearning components are combined will depend on the context in which hybrid learning is being delivered. The term *adult learner* has been used in the literature to describe any learner over the age of 18. In this study, the term *adult learner* will be used to refer to learners returning to school to engage in post-secondary education (i.e., university or college) or workplace training, unless otherwise specified. The term *mature learner* refers to a subset of adult learners who have returned to school to complete their OSSD. Throughout the thesis, all references to the *Ministry of Education* refer to the Ontario educational governing body.

Overview of the Thesis

Chapter One introduced and described the purpose and context of this study. Chapter Two presents a comprehensive review and critique of the literature, beginning with an exploration of the characteristics of the mature learner, followed by a general discussion on online and hybrid learning. In Chapter Three, the research questions that guided this inquiry are presented, along with a description and explanation of the strategies used for data collection and analysis. Chapter Four introduces and describes the participants, and provides a narrative of experiences from the inquiry. Chapter Five reveals the categories and the themes that emerged from the hybrid learning experiences of the mature learners and their instructor. These themes are synthesized with other literature in Chapter Six to explore how the findings support, extend, and question current literature. Finally, the implications of the findings and recommendations for hybrid learning are discussed in Chapter Seven, along with suggestions for further research and conclusions.

Chapter 2: Review of Literature

A review of the relevant literature in the areas of mature learners and hybrid learning was conducted. Sources of information included professional journals, government and school board reports, Internet documents, textbooks, and consultations with experts. First, the identity and needs of the mature learner are defined and suitable teaching strategies reviewed. Next, the importance and challenges of integrating technology into education are articulated, followed by a description of key learning strategies. Finally, the characteristics of an effective hybrid course are presented.

Mature Learners

Adult Secondary Education

Statistics Canada (2001b) reported that 3.4 million Canadians (17%) do not possess a secondary diploma. In 1998, a Ontario-based survey about adult literacy found that 20% of Ontario adults did not have the basic literacy and numeracy skills for work and another 24% needed upgraded literacy skills necessary to meet changing labour market needs (Ministry of Education). In contrast, the 2003 International Adult Literacy and Skills Survey indicated that the adult literacy rate in Ontario was 16% (Statistics Canada). The survey also connected literacy with the extent to which adults can interpret written text. In today's context, adults need a higher level of literacy, especially for employment. Data from a longitudinal survey of 50,000 youth (ages 15-20) revealed a direct correlation between an absence of a high-school diploma and difficulty finding employment (Bushnik, Barr-Telford, & Bussière, 2004). In 2006, the Ministry of Education focused on improving the graduation rates in Ontario secondary school by implementing programs such as Success to 18, an initiative focused on keeping students in schools by adapting school structure and programs. Most recently, the Ministry of Education

released a goal to improve the rate of OSSD completion from 68% in 2005 to 85% by 2010-2011 (2007b). While these programs aim to prevent students from dropping out of high school, statistics continue to reveal a portion of the population unsuccessful in the completion of their OSSD and its impact on their employability. To remedy this shortcoming later in life, adults can return to school by attending night school or enrolling in an alternative or adult day school (Ministry of Education, 2005).

A large-scale American and Australian longitudinal study of high-school dropouts' subsequent education discovered that 60% eventually complete a high school diploma or equivalent certificate (Rumberger & Lamb, 2003). Similarly, Canadian statistics indicated that 90% of high school leavers return to school, in some form, within five years of dropping out (Bowlby & McMullen, 2002). Bowlby and McMullen connected return to school with a decline in the labour market, while Klein et al. (2006) linked the return with life changes such as children starting school or the need for a promotion. Twenty-four percent of school returners enrolled in a day school or alternative program (Rumberger & Lamb). A recent survey of 1500 adult learners found a correlation between returning to school and improved reading and writing abilities, self-esteem, confidence and social skills (MCL, 2003). The Ontario Secondary School Teachers' Federation (OSSTF; 2004) described increased rates of employment and/or continuing education and decreased dependence on welfare among individuals graduating from an adult day school. The importance of developing a better understanding of what produces a successful ASE program can be seen by the impact they have on the communities they serve.

Unfortunately, funding for adult day-school programs decreased by 70% in 1996 (Clark, 1998; Ramaley & Zia, 2005; Statistics Canada, 1995). In Ontario, this has translated into fewer dollars allocated per student; a full-time adult student generates \$2.33 per hour in grant money,

while an adolescent student taking exactly the same classes generates \$7.45 (Mombourquette et al., 1999). As a result, resources and services within adult day schools have been eroded while class sizes have increased. These resources may include professional development for instructors to improve their knowledge of ASE pedagogy (Patterson, 2008). Teaching loads have been affected by these budget cuts; instructors now manage and instruct a greater number of mature learners academically and socially (OSSTF, 2004). While it is clear that the Ministry of Education recognizes a correlation between class size and quality of education, its funding policies do not extend to ASE (2007a). The end result is that adult day schools and educators are not empowered to readily meet the needs of their clientele. From a programming standpoint, the need to make effective use of instructor contact time has become even more critical.

The Profile of the Mature Learner

There is a large body of research focused on adult learners at the post-secondary level, and a smaller body of research focused on adult learners enrolled in ABE, however, there is relatively little work focused on adult learners enrolled in ASE (Bradley & Goldman, 1996; Cocklin, 1991). Knowles (1970) defined adult learners as autonomous, self-directed, and goal oriented. He described self-directed learning in adult education as “a process in which individuals take the initiative...in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes” (Knowles, 1975, p. 18). Bynner (2008) described adult learners engaging in post-secondary or workplace training as being “distinctive demographically, with the peak participation rates occurring through the middle-20s to the late-40s. They also tend to be relatively high up on the socioeconomic scale and, in the case of men particularly, tend to be employed (p.18).”

In contrast, mature learners are distinct among adult learners based on one key qualifier: they return to school to complete their OSSD. However, the profile of the mature learner is diverse; learner differences include disability, ethnicity, culture, language, age, gender, experience, and geography, or any a combination of these characteristics (Gadbow, 2002). Severiens, ten Dam, and Nijenhuis (1998) divided mature learners into three groups: those who failed at a composite high school and want solely to complete their diploma, those returning from the workplace to embark on a new life direction, and those, mostly female, who were not able to access education earlier in life. The Ontario Ministry of Education (1987) described an additional group of mature learners: immigrants who need to meet Ontario education requirements, both in terms of language-acquisition and academics. The Ministry specified that some mature learners have physical disabilities or learning difficulties. In Ontario, a survey of mature learners indicated that 48% were trying to get off welfare, 53% needed literacy upgrading or additional credits, 62% were female, and 16% had disabilities (OSSTF, 2004). Driscoll (1998) and Patterson (2008) described a typical adult basic and/or secondary classroom: a single parent, an unemployed 50-year-old speaking English as a second language, or individuals with criminal records, abuse problems, and a variety of other social, emotional, and economic problems. The diversity of an adult secondary classroom (i.e., age, socioeconomics, ethnicity, educational goals, motivation, and interest) presents a challenge for educators designing and delivering programs to meet learner needs. Figure 2 situates the mature learner within the broader population of adult learners.

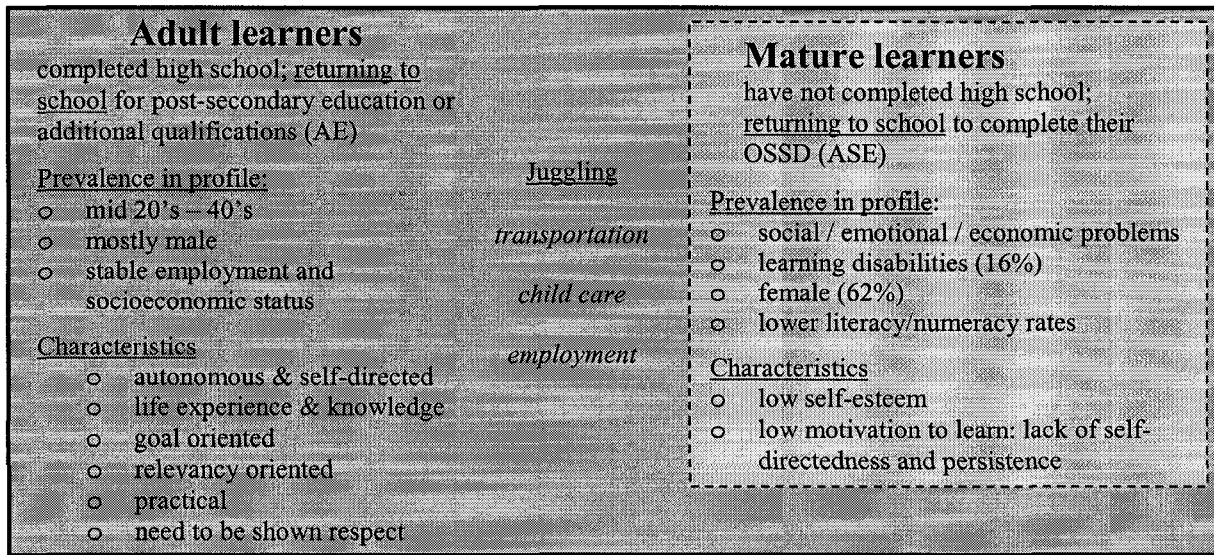


Figure 2. Mature learners nestled within the adult learner population.

Under the broad umbrella of adult education (i.e., post-secondary, workplace training, or ASE settings), all learners must balance a variety of factors that could potentially affect their ability to attain their educational goals. For example, issues such as transportation, child care, or work commitments have been identified as potential barriers for both mature and adult learners (Cantor, 1992; Gadbow, 2002; Gadbow & Du Bois, 1998; Klein et al., 2006; Patterson & Mellard, 2007). Research focused on a broader population of adult learners with special needs revealed characteristics such as low literacy competency and low self-esteem translated into low motivation or persistence in a course (Gadbow, 2002; Klein et al., 2006; Patterson, 2008). For returning adults at the post-secondary level, Ntiri et al. (2004) indicated that learner anxiety and emotions from past negative educational experiences detracted from the integrity of their study skills and perseverance at subsequent learning experiences. Both Cocklin (1991) and Patterson reported similar characteristics among mature learners.

Learners who re-enter high schools are often required to abide by the regular expectations of a high school student, an environment which does not often match their needs. Entwisle et al. (2004) conducted a study about mature learners and identified factors that influenced the achievement of a diploma. These factors were classified as extrinsic or intrinsic to the school and its community. This study supported earlier work by Gadbow & Du Bois (1998) who identified intrinsic factors as potential barriers for all adult learners. Some extrinsic factors were identified: socioeconomic status, academic standing, parenthood status, and learners' expectations. Some intrinsic factors included scheduling of programs or courses, the use of instructional techniques, or the assessment of learning. Both types of factors influenced learners' ability to remain focused on their course work. A poor combination of extrinsic and intrinsic factors was associated with the higher attrition rates at adult day schools in comparison to composite high schools (James, 2000; Lujan & DiCarlo, 2007). For example, a course solely offered in the afternoon prevented a single mother from enrolling because she works afternoon shifts at work. The combination extrinsic employment and intrinsic inflexible course schedule work to obstruct the achievement of educational goals. The needs of adult learners suggest flexible course scheduling to increase learner success. Entwisle et al. (2004) recommended conducting research to identify ways to develop flexibility in secondary school programs to meet mature learner needs; their research did not describe any specific mechanisms that offer flexibility. Patterson & Mellard (2007) recommended that ABE and ASE programs need to serve learners in new ways. The unlimited combinations of extrinsic and intrinsic factors connected with mature learners present an opportunity for instructors to examine innovative teaching strategies to meet learner needs and reduce attrition.

Commonly referenced in attrition literature, Tinto (1975) developed a predictive model for learner persistence that identified the need for academic and social integration within an educational institution. Tinto (1998) asserted two primary factors related to a learner's persistence: personal characteristics, including commitment to the institution and educational goals, and the nature of the learner's interaction with the college. Though focused on post-secondary education, this model offers a framework for mature learners. A number of studies have focused on identifying factors integral in both a learner's decision to dropout and return to school: gender, race, social background, parent's level of education and occupation, academic grades, engagement with school, and employment (Bradley & Goldman, 1996; Rumberger & Lamb, 2003; Statistics Canada, 2000). Rumberger and Lamb further described attributes interwoven within these factors: lack of knowledge or skills, cognitive ability, low self-esteem, and basic work skills such as punctuality, perseverance, and social skills. While Chuang (1997) discussed that dropouts' activities during their out-of-school period had little influence on their decision to return to school, key findings from Entwisle et al. (2004) identified that employment experiences of some dropouts lead them to complete high school. Their study was limited to high-poverty learners completing their GED in Baltimore, rather than learners who return to a traditional adult high school. At the same time, it focused on quantitative statistics of learners, rather than delving into their personal experiences. This may have prevented the researchers from revealing the richness of the learners' decisions to drop out or to return to school. For instructors and administrators, a broad understanding of factors influencing a learner to drop out is essential in building programs for those who choose to return.

Meeting the Needs of Mature Learners

When developing and delivering instructional courses, educators should be cognizant of the learner characteristics and the principles of adult education in order to create positive learning outcomes (Klein et al., 2006). While the existing literature clearly described barriers for the mature learner and offered guidance for building programs, research describing successful programs or courses specifically for mature learners is scarce. The Conference Board of Canada (2001) and the Basic Skills Agency (2007) outlined critical skills necessary for success in the workplace: fundamental numeracy and literacy skills; personal management skills such as attitude, responsibility, or adaptability; and teamwork skills. An ABE study revealed that instructors spend little time teaching learning skills such as organization, strong work habits, the ability to work in a group, and time management to learners (Lunenberg & Volman, 1999; Patterson, 2008). Whether an ABE or ASE course, the development of both academic (e.g., read and interpret information from a graph) and non-academic skills (e.g., teamwork, initiative) should be incorporated. Advances in education would also point to skills such as Internet research and/or proficiency to learn online (participation in a discussion forum or accessing electronic information independently) as key learning skills (Statistics Canada, 2003).

Whether engaging in AE, ABE, or ASE, adult learners approach learning from the standpoint of relevancy, drawing upon accumulated life experiences to put learning into context and solve problems practically (Knowles, 1975; Lunenberg & Volman, 1999). However, Lunenberg & Volman suggested that instructors do not take enough responsibility for relating learners' experiences to the subject matter. In both eLearning and adult education, a number of studies linked the absence of effective instructional strategies as deterrents to learner persistence, while educational programs incorporating adult needs in a relevant, flexible, and challenging

way improved outcomes (Dewar, 1999; Gadbrow, 2002; Hartman, 1995; Ntiri et al., 2004; Patterson, 2008; Rovai, 2003). A model for eLearning described by MacDonald et al. (2001) identified the need for efficient, effective, and flexible education and training for adult learners. The Ontario Ministry of Education's Adult Education Review (2004) described effective adult education as "when they need it, where they need it, and how they need it" (p. 2). The broad message from this research points to an opportunity for the creation of learning opportunities to encompass varied learning styles, while allowing learners the flexibility to manage their own learning path.

Building an effective program for any adult learners could be accomplished using a flexible problem-centered approach where learners can construct their own knowledge and skills (Driscoll, 1998). Cocklin's (1991) ASE recommendations included teaching practices that recognize the diversity of learners, offer flexibility for attendance, and schedules a timetable that allows learners to juggle their commitments. Within adult learning theory, Knowles (1990) recommended increased learner control, self-directedness, and opportunities for taking responsibility for their learning. Jahnukainen (2001) concluded that different and flexible strategies in non-traditional settings would tackle the heterogeneity of mature learners and improve outcomes. For example, a flexible schedule allowing learners to balance the demands on their time would indicate that their needs were being taken seriously. Recent directions from the Ministry of Education highlighted a trend towards offering "Ontario high school students more ways to accumulate credits to graduate ... to customize their high school experience around learning that's relevant to them" (2007b). Simultaneously, maximizing the effectiveness of contact time would make better use of funding and provide clearer direction for the realization of individual learning goals. A survey of 1500 Canadian adults revealed that flexible learning

strategies and an ability to set a course structure and pace were desirable to learners (Tough, 2002). Within the adult day school, the characteristics of the learners need to be integral in the instructional design of programs to ensure positive learning outcomes and minimize attrition rates (Gadbow, 2002).

The Hybrid Learning Modality

Technology in Education

Technology offers a path to refresh teaching strategies and establish flexible and relevant programs for mature learners. A technological evolution was described in the curriculum documents for all subject areas revised and published by the Ministry of Education in 2006, as well as in the directions for eLearning as outlined in the task force report from the Council of Ontario Universities (2000). This evolution impacts educational systems at all levels where instructors and professors are strongly encouraged to integrate technology into their teaching. Within a classroom setting, computers can take on a variety of roles including tutoring learners, presentation tools, and programming (Grabe & Grabe, 2004). The birth of the Internet in 1985 and its explosive growth in the mid-1990s created a communication system to augment and diversify delivery mechanisms within education (Roblyer & Schwier, 2003). Educators use the Internet to engage learners in constructing meaning through self-directed inquiry, guided activity, or community building (Becker, 2001). Goldberg, Salari, and Swoboda (1996) described online course management systems, such as WebCT and Blackboard, as user-friendly “non-programming” means to incorporate eLearning into courses¹. Jafari et al. (2005) indicated that e-Learning environments support day-to-day learning, teaching, and research, whether learning is

¹ A non-programming approach denotes that instructor activate features, while format and appearance are set by BlackBoard. From a preset list, instructors select features such as discussion forums or quizzes, or upload lesson files. For a quiz, an instructor would input actual questions and feedback, and set the number of attempts.

based in the classroom, online, or a combination of the two. The systems operate through a web-browser such as Netscape Explore or FireFox, and may require technical components such as JavaScript or FlashPlayers to be present on the computer through which they are accessed.

A great deal of research has focused on the effectiveness of eLearning at the post-secondary level. In comparing online and F2F learning, Aragon, Johnson and Shaik (2002) identified positive learning experiences and outcomes in both environments. In addition, eLearning offers learners greater control over their learning, easy access to course materials, and the flexibility to schedule work completion around other commitments (Kassop, 2003; Langan, 1997; Schrum & Hong, 2002). The sense of greater control inherent in eLearning is consistent with increased motivation, as described in self-determination theory (Gagné & Deci, 2005). Quality eLearning allows learners to apply previous knowledge and construct new meaning, an approach identified as suitable for adult learners (Hoadley & Linn, 2000; Johnson, 2001). In the post-secondary context, Dennis (2003) and DeVitt (1997) described data analysis, modeling, and simulation as effective eLearning activities. Both researchers determined that learners often spend more time on task while online than F2F. Increasing learner engagement in this way could improve outcomes in ASE. The nature of the eLearning environment inherently assists learners to develop reading, writing, and critical thinking skills.

While the benefits of eLearning are clearly documented, eLearning courses have been associated with attrition rates ranging from 30-80% (Flood, 2002; King, 2002). These rates are higher than those associated with classroom-based learning (Bonk, 2002). Attributes such as motivation, self-direction, a high-level of discipline, ability to use technology, and sufficient time to engage in course materials were listed as enablers for success in an eLearning environment; these are attributes not all learners possess (Kim & Bonk, 2006; Packham et al., 2004; Rovai,

2003; Schrum & Hong, 2002). While a classroom environment is intended for learning, online learners face greater distractions and interruptions while learning (Nöe, 2005). Financial problems, family complications, work conflicts, and poor academic performance were also listed as dominant barriers for an adult's persistence online (Rovai; Willems, 2007). Furthermore, Roberson and Klotz (2002) pointed out that the lack of F2F interaction decreased learner motivation and persistence. This is consistent with findings in the field of adult learning (Knowles, 1990; Lujan & DiCarlo, 2006). This suggests that a fully online course may not be suitable for some mature learners. At the same time, effective design and instructor presence within an eLearning course are widely documented as playing an important role in a learner's experience. If course design is poor or the instructor's presence is limited, learners may be less engaged. Effective design will be discussed in a subsequent section.

Although the traditional F2F classroom does offer opportunity to bolster study skills, engage in discourse, and collaborate, it is limited by virtue of its location and time. Within a classroom, the immediacy of contact allows an instructor to engage in verbal and non-verbal communications with learners which enhance both the learning experience and learner motivation (Christophel, 1990; Knowles, 1990; Lujan & DiCarlo, 2006). Gadbow (2002) and Holton et al. (2006) recommended blending teaching approaches and technologies as an option for meeting different learning styles and needs of adult learners. Hybrid courses have emerged as an integrated approach to optimize course delivery. Building on the strengths of both the classroom and online environments, hybrid courses at the post-secondary level have been shown to improve overall learning efficiency and embrace differing learner needs while minimizing the negative features inherent with either physical and virtual classrooms (Hysong & Mannix, 2003; McCray, 2000; Patterson, 2008; Skill & Young, 2002; Trasler, 2002). The combination of

classroom and online learning is dependent on the needs of the learners and the requirements of the learning experience. For example, in one workplace, a hybrid course involved a bi-annual F2F meeting with eLearning components throughout the fiscal year (Trasler). In one post-secondary setting, a hybrid course involved one monthly class with eLearning continuing throughout the month (McCray). In the secondary setting, where traditional classes are held daily, a hybrid model might offer F2F classes two days a week with eLearning for the remaining three days (High-School Reform Committee, 2004; Tennessee Board of Regents, 2004). Kim and Bonk (2006) noted a need for studies focused on types of hybrid learning and activities that lead to hybrid-learning success.

The eLearning components of a hybrid course offer learners the convenience of distance education and allow them to establish their own timetables (Trasler, 2002). Within their week, learners who could learn at optimal times and at their own pace, test their knowledge construction daily, and interact frequently with instructor and peers (Draves, 2000; MacDonald & Thompson, 2005; Nisar, 2004); these structures exist within the constructs of a hybrid course. The eLearning environment provides active engagement in learning activities to foster mastery learning (Dupeyrat & Mariné, 2005). The classroom components establish a supportive learning community, thereby encouraging accountability, motivation, and persistence inherently through personal contact (Akkoyunlu & Yilmaz-Soylu, 2006; Rovai, 2003; Willett, 2002). The classroom also fosters academic and social interactions and enable for early interventions with the development of computer literacy, reading, writing, and study skills (Rovai). Compared with a F2F course, Roberson and Klotz (2002) and Trasler identified increased communication with learners within a hybrid model. In this medium, learners can receive feedback from their instructor or other learners via email or F2F and from the course management system via

assessment tasks. In fact, a hybrid course has been found to increase learner engagement with course materials, leading learners to seek out more assistance (Cornelius & Gordon, 2006; Garnham & Kaleta, 2002; Lin, 2008). Furthermore, Klein et al. (2006) discovered that hybrid delivery of courses facilitated motivation to learn more than classroom instruction. Sitzmann et al. (2006) also found the level of knowledge acquisition for learners in a hybrid learning course was superior to that of learners in online or classroom courses. Overall, it has been demonstrated that a hybrid model can establish a flexible and learner-centered course, where learners' needs are taken seriously, and motivation is increased (Ntiri et al., 2004; Normand & Littlejohn, 2006). Most importantly, mature learners may be better prepared for further study or employment as part of a hybrid learning experience. Figure 3 presents a snapshot of the research base in the fields of eLearning, hybrid learning, and ASE. It exposes the prevalence of eLearning, and to a lesser extent, hybrid learning research at the post-secondary level. When filtered through adult secondary education, a gap in the research emerges.

Building a Hybrid Learning Community

In the scaffolding of a hybrid course, course designers and instructors should incorporate instructional-design theories and consider the assets of each medium to optimize conditions for motivating and engaging learners. Building a community of learners, whether in the traditional or virtual modality, follows a life cycle described initially by Palloff and Pratt (1999) as forming, norming, storming, performing, and adjourning². An instructor should be cognizant of this life cycle over the time period of the course to effectively support learners (Johnson, 2001). Lanham and Zhou (2003) defined two distinct areas associated with hybrid learning: blending traditional

² Forming is described as the initial testing of the water phases, while norming moves participants towards a common understanding of the learning community. Storming refers to conflict that is an inherent and necessary part of learning community formation; once overcome, participants move into the work phase and perform tasks together before the course terminates (Palloff & Pratt, 1999).

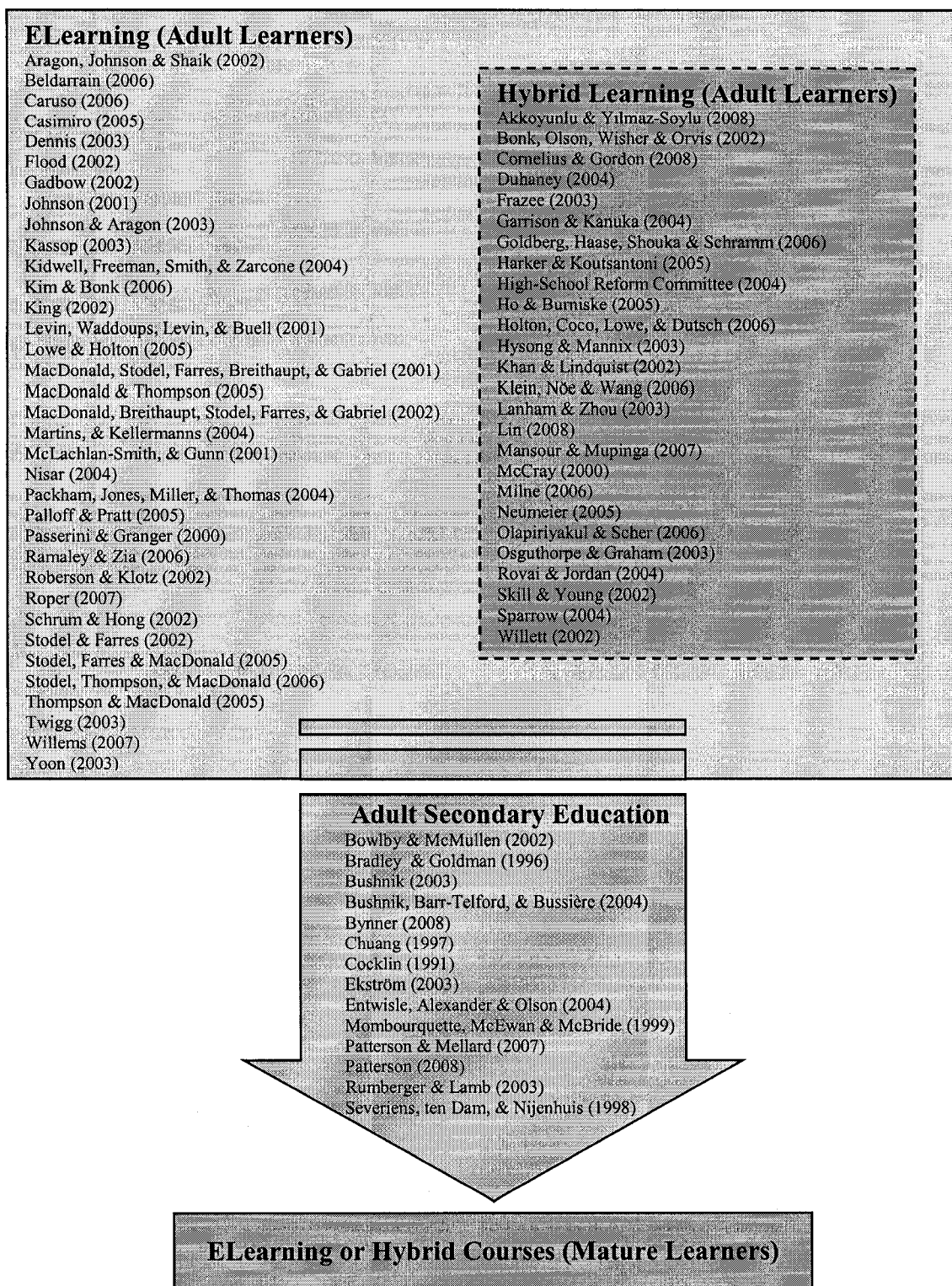


Figure 3. ELearning and hybrid learning research in the context of ASE

classroom and online learning, and blending synchronous and asynchronous e-learning technologies. They further advocated for a balance of instructor- and learner-centered learning to create an environment that decreases cultural barriers. A learner accessing eLearning materials interacts with the material, as well as with others about the material, to establish active learning (Stodel & Farres, 2002). These interactions, including learner-learner and learner-instructor, can occur in a synchronous or asynchronous manner, as well as in public and private forums. Within these interactions, learners should receive formative and summative feedback (Yoon, 2003). Both the quality and the quantity of these interactions affect the acquisition of content-related knowledge and communication and social skills (Akkoyunlu & Yılmaz-Soylu, 2006; Johnson & Aragon, 2003). Many researchers have also emphasized how these interactions build a successful learning community (Caruso, 2006; El-Tigi & Branch, 1997; Goldberg et al., 2006; Neuimeier, 2005; Rovai & Jordan, 2004; Stodel et al., 2006).

In transcending the boundaries of a traditional classroom toward hybrid learning, the learning objectives and their relationship to the organizational structures need to align. Barker (2002) highlighted the natural tendency to focus first on the content being offered. Simply making teaching materials electronic does not necessarily translate into high-quality eLearning experiences. Barker suggested using an organized, user-friendly, consistent framework to develop eLearning sessions that enable critical thinking and growth within a course. He further highlighted that the design of an “excellent course for Web delivery may be more challenging and time consuming than anticipated” (p. 184). A blueprint for a successful hybrid course should encompass a consistent and concise format. According to Barker and MacDonald et al. (2001), a course should include clear objectives, an evaluation scheme, content modules, and summative tasks. Each module needs to indicate timing, three to five performance objectives, content

summary, skills and knowledge exercises (tutoring), primary and secondary sources of information, and required assignment(s) for evaluation and reflection.

The complex process of redesigning a traditional course for Internet-based or hybrid delivery requires thorough commitment and planning in design and implementation to ensure validity and longevity of course content (Beldarrain, 2006; Frazee, 2003; McRay, 2000; Passerini & Granger, 2000; Stodel et al., 2006; Wallace, 2002). Both Keller's ARCS model of motivation (Keller, 1987) and Gagné's Nine Events of Instruction (Gagné, Briggs, & Wager, 1992) continue to guide the structuring of course content. The ARCS model guides designers to use effective course design for extrinsic motivation, rather than assume intrinsic motivation on the part of the learner. The stages (attention, relevance, confidence, and satisfaction) outline a mechanism for instruction. By creating authentic and meaningful learning opportunities to capture learner interest and meet learning needs, a course designer and/or instructor optimize motivational opportunities (Frazee, 2003; Johnson & Aragon, 2003; Keller, 1987). This type of learning uses real-world problems and projects that allow learners to explore and discuss these problems in a way that is relevant to them. For example, learners may be asked to analyze their spending habits using an Excel spreadsheet and collaboratively explore how to make adjustments. Gagné's events of instruction were developed to activate processes for effective learning, with the underlying intent of motivating learners. Gagné intended these events to be a foundation for designing effective instruction and selecting appropriate media in the overall structure and daily lessons of a course. Appendix B depicts the connection between the two models. While Gagné's model may be considered more cognitivist rather than constructivist, the incorporation of instructional strategies within the overarching principles of the course and the framework of daily lessons can be used by course designers to establish comprehensive and

authentic content for learners. This content should focus on learner-centred teaching and learning strategies which allow students to be active learners, work in a group environment and construct knowledge and understanding in their learning process (Neo, 2005). Both Gagné's and ARCS models are useful as a resource for instructors in planning and designing quality course content, but also as a guide for researchers who seek to evaluate existing course materials.

Pedagogically, learning activities should take advantage of the characteristics and assets of the learning medium (Bonk & Cummings, 1998; Stodel et al., 2006). Emerging technologies such as wikis, blogs, podcasts, and even cell phones now offer an even wider range of eLearning tools (Rovai & Jordan; Mansour & Mupinga, 2007; Oblinger & Oblinger, 2008). Time spent online can be allocated to learning content, while F2F time can be directed towards higher-levels of learning, where the construction of application-based, interactive activities to cull, filter, or integrate course materials can be aimed at raising learner achievement (Goldberg et al., 2006; McCray, 2000; Olapiriyakul & Scher, 2006; Roberson & Klotz, 2002). Kidwell et al. (2004) recommended designating F2F learning to the development of other learning skills, such as social interaction, work habits, and communication; these skills were previously identified as deficient among mature learners. In eLearning, the content accessed by learners can be static or dynamic in nature. For example, the inclusion of a video can bring text to life (Berge, 2000). Jafari et al. (2005) advocated for a web-based environment "beyond a course management container" (p. 57); this type of environment would integrate content archives, multi-model communication (e.g., instant messaging, voice recordings, emails), and collaboration tools. However, they cautioned that "what is motivational in a classroom may not be motivational when a learner listens to a podcast lecture" (p. 58). Berge warned against dense content that may impede the learning process and stifle the sense of learning accomplishment. In developing tasks,

the selection of technology tools should align with the content, the desired outcomes, the teaching style of the instructor, and the learning styles of the learners (Levin, Waddoups, Levin & Buell, 2001; Rovai & Jordan, 2006; Stodel et al.).

In conclusion, this review of literature has described the profile of mature learners and exposed a need for new alternatives in the delivery of ASE programs. While technology presents options, research has indicated that its design and use may not necessarily meet learner diversity and needs. The hybrid learning environment offers the possibility to maintain the supports, structure, and social interactions for mature learners inherent with direct contact, while offering both flexibility and varied teaching strategies to motivate and engage learners. Implementing a constructivist learning environment built upon authentic activities in a flexible and supportive manner may be suitable for mature learners. Although research has investigated the effectiveness of hybrid learning, to date, the experiences of learners at the secondary level have remained relatively unexamined (Bynner, 2008). This inquiry will attempt to address this shortcoming.

Chapter 3: Methodology

Purpose of the Research

The purpose of the present study was to develop an understanding of the experiences of the mature learners enrolled in a hybrid course, along with those of the instructor delivering it. Exposing these experiences from the perspectives of learners and instructor provides insight into the strengths and limitations of the learning experience and hopefully lead to recommendations for the implementation of hybrid delivery method.

Advances in information technology are changing instruction in the training industry and in education (Dolezalek, 2004). ELearning is still a relatively novel commodity in secondary schools. A subset of eLearning, hybrid courses are even less common and moreover, the effective implementation of a hybrid course is in its infancy (Harker & Koutsantoni, 2005). Adult secondary educators strive to find new methods to deliver curriculum to meet the needs of mature learners and to make use of technological innovations. The learners at an adult secondary school are over 18 years old, which means they are considered adults. In a traditional high school where learners are younger, the school is legally required to directly supervise them throughout the school day. The age of the learners at an adult day school negates this legality. However, within the present study, all existing courses required regular F2F attendance. This disparity points to the potential for flexible learning alternative within the structure of adult secondary education.

The community of mature learners seemed to be a suitable population to pilot a hybrid course. The hybrid course would meet the needs of the mature learners by decreasing attendance requirements while still offering F2F support; a course seemingly capitalizing on the positive features of both F2F and eLearning environments (Hysong & Mannix, 2003). The present study

examined the experiences of both the learners and the instructor in a hybrid course. It was conducted within a constructivist paradigm using case study methodology (Merriam, 2001). Yin (2003) denoted that case studies can encompass any mix of quantitative and qualitative evidence, and within the present study, a combination of qualitative and quantitative data collected information on the learners' and instructor's experiences.

Research Design

In order to understand how learners function within a hybrid learning environment, quantitative and qualitative data collection methods were implemented. Quantitative methods provided information on the demographics of the learners (backgrounds, technological skills, etc.) and on their satisfaction with the hybrid course as it progressed. Qualitative data collection methods emphasized the importance of context and provided a deeper understanding of the participants' frame of reference with the environment (Land & Hannafin, 1997; Marshall & Rossman, 1999). Kim and Bonk (2006) suggested that learner satisfaction can be used to assess the quality of eLearning experiences.

Epistemology

Epistemology reveals the relationship between the researcher and the researched (Creswell, 2003). Researchers who frame their research within a constructivist paradigm demonstrate their belief that they are co-participants in their studies. In the present study, a constructivist paradigm was used and meaning constructed in the dialogue between the learners and me (Mitchell, Johnston, & Keppell, 2004; Sexton, 1997). Constructivist researchers actively participate in the research setting and observe activities within the setting. This permits researchers to contribute to the sources of data as they facilitate and participate in the inquiry

(Lincoln & Guba, 2000). As the inquiry progresses, the researcher and the participants generate, interpret, and make meaning of the data.

Ontology

Qualitative research is based on the view that reality is constructed by individuals interacting with their social world (Creswell, 2003). The focus of this research was to collect and interpret the data from a particular case. Adopting an ontological stance that knowledge and truth are created and not discovered provided a consistent approach to collecting and analyzing data within a constructivist paradigm (Bogdan & Biklen, 1998; Gruber, 1993, Merriam, 2001). The creation of a hybrid learning environment allowed the instructor, the learners, and me to construct multiple realities (Creswell, 2003). Through the lens of constructivism, these emerging multiple realities were collected as data (Lincoln & Guba, 2000).

Case Study Methodology

As a reflection of a constructivist epistemology and ontological stance, this inquiry was conducted using a case study design to allow for interpretations within the context of the research setting. Creswell (2003) defined a case study as an “in-depth exploration of a bounded system (e.g., an activity, event, process, or individuals) based on extensive data collection” (p. 485). Creswell recommends case study as a methodology if the problem to be studied “relates to developing an in-depth understanding of a ‘case’ or bounded system” (p. 496) and if the purpose is to understand “an event, activity, process, or one or more individuals” (p. 496). In the present study, the case is the hybrid section of the course. The case study aims to reveal how participants feel about and behave in one instructional delivery setting. Merriam (2001) characterized one aspect of case studies as descriptive, “a rich, thick description of the phenomenon under study” (p. 29). She further added that a “case study might be selected for its very uniqueness, for what it

can reveal about a phenomenon” (p. 33). In this case, hybrid learning is unique at the secondary level within the school board, especially with the subset of mature learners. Studying a learning innovation through case study research is a notion described by Merriam (2001). Based on a survey of current research, Johnson (2001) surveyed existing research and recommended a case study approach in studying the development of a community of practice. Merriam further supported the use of case studies in applied fields, suggesting that within this design “problems and programs can be examined to bring about understanding that in turn can affect and even improve practice” (p. 41). The hybrid course provided an opportunity to collect data from a variety of sources, using both electronic and F2F methods, allowing me to develop a rich picture of the learners’ and the instructor’s perceptions of the effect of hybrid modalities on learning. In choosing the case study approach, my role was two-fold: educational consultant and researcher. The instructor consulted with me on effective eLearning structures and activities. This allowed for inductive interpretations of rich, thick data from all perspectives: learners, instructor, course designer, and researcher.

Research Questions

The present study, which uses qualitative inquiry, has the potential to reveal key contributors to the delivery of a hybrid course. From the gaps pointed out in the review of literature, I saw a need to address an overarching research question: *What are the experiences of mature learners participating in a hybrid course?* To help explore the overarching research question, two specific research questions guided the inquiry:

- How do contextual factors influence the collective hybrid learning experience?
- How does the instructor influence the hybrid learning experience?

Site and Participants

The Site

The context for the present study was an Introduction to Business (BTT2O) hybrid course delivered at an adult day school within an Ontario School Board. The school, where enrolment was approximately 1200 learners, had mobile computer projectors, portable computers for instructor use, and wireless Internet access throughout the school. A School Improvement Committee had identified potential course delivery options, including hybrid learning, to improve student learning. In principle, the school principal and the department head for the Business and Technology department were committed to a hybrid delivery model.

Within the school board community, there had been a shift towards the use of eLearning. A comprehensive three-year board document outlined plans to implement eLearning to develop online literacy for secondary students in preparation for post-secondary education and/or workforce employment. At the start of the study, there were no eLearning courses offered within the school board. However, the board had hired two eLearning consultants to implement their plan. At the onset of data collection in the present study, there were six eLearning courses in development; no hybrid courses were being developed or delivered. Subsequent to the delivery of the BTT2O pilot hybrid course, there were five eLearning courses offered within the school board. No other hybrid courses have been developed or offered to date. In terms of technology, the board had purchased licenses for board-wide use of online course-management software (Blackboard Learning System, Basic Edition TM (Version 6)). In the subsequent year, the board changed its license for its web-based environment (Desire2Learn).

The implementation of a hybrid course at the adult secondary day school was consistent with both the school and board technological directions. However, until the undertaking of this

inquiry, no such initiative to offer BTT2O as either a hybrid or an eLearning course had been implemented.

The Participants

The Learners. The participants were typical adult secondary learners, intent on completing their OSSD, as described in Chapter 2. They were enrolled in one of two separate sections of BTT2O (Period 2 and Period 3) taught by the same instructor. All BTT2O learners were provided with a hybrid learning recruitment package (Appendix F) and a consent form (Appendix G). Based on their profile, learner attendance was identified as a potential barrier to collecting completed surveys during the study. Any participants who were absent on days the surveys were administered would be subsequently contacted via email as an attempt to collect as much data as possible. Further description of the participants of the study is found in Chapter 4.

The instructor. During the selection of teaching assignments, the hybrid course was listed as a teaching option to all instructors in the Business Department. In May, one instructor stepped forward to pilot the hybrid course for the department. A pseudonym, Mary, will be used to refer to this instructor throughout this thesis. She will be further introduced in Chapter 4.

The Course

The grade 10 BTT2O course introduces learners to information technology in a business environment (Ministry of Education, 1999b). The course expectations are provided in Appendix C. Mary delivered two sections of the hybrid course over a 5-month period, starting in February. The timeline for the inquiry is depicted in Appendix D. She maintained a consistent approach to curriculum delivery in both sections, teaching the same topics during 75-minute class periods daily. The course had been originally scheduled for September (the previous term) but timetable conflicts caused delays. The department head scheduled one computer lab to be available at all

times throughout the school day. The intent was to provide technological resources for those wishing to participate in hybrid learning, whether they had a computer and Internet access at home or not.

In preparation for the course, Mary attended a BlackBoard workshop, focusing on eLearning techniques, in June 2005. In her planning, Mary consulted the conceptual framework (see Figure 1) to guide her instructional design of the hybrid course. She also consulted me on technical and pedagogical issues throughout the design, development, and delivery of the course. During our discussions, I provided literature on Gagne's Nine Events of Instruction and the ARCS model (Appendix B) as a more tangible support for her planning. Communication between myself and the instructor occurred mostly via email. A number of telephone calls and four F2F meetings also took place throughout the process.

Mary created a course continuum which outlined F2F sessions for the first two weeks and subsequent eLearning sessions during the third week (see Appendix E). In keeping with both Gagne's and ARCS, introductory course activities gradually immersed learners into the hybrid environment and supported eLearning skills development (MacDonald & Thompson, 2005). This was intended to *gain learner attention* with respect to eLearning. It also created an inclusive learning environment where all learners were encouraged to develop basic technological skills and use the features of BlackBoard prior to learning independently online (Johnson & Aragon, 2003). The continuum also reflects the *stimulation of prior learning* and the *presentation of new material* as Mary integrated new tools within BlackBoard (communication, assessment). The F2F eLearning activities allowed learners to *perform* online when Mary could offer both *guidance* and *feedback*. Beyond the initial introduction of eLearning, Mary planned to structure learning activities to capitalize on the learning environment. ELearning sessions would focus on

the acquisition of knowledge and skills. Classroom sessions would focus on the introduction of skills, such as the features of PowerPoint, or on the consolidation of learning.

The hybrid schedule specified that learners would attend F2F sessions in the classroom on Mondays, Tuesdays and Thursdays and eLearning sessions on Wednesdays and Fridays. ELearning sessions could be completed asynchronously from any place a learner accessed the Internet. Although learners were not required to be online at a specific time or place, completion of the eLearning components would be required prior to the following F2F session. The eLearning activities approximated 75 minutes, equivalent to length of a F2F session. On eLearning days, the instructor would be available online, in person, or by telephone to respond to questions and monitor learners electronically during regularly scheduled class hours. Throughout the course, I had access to both the eLearning and F2F environments to observe learners during their learning process.

Data Collection

In order to form a comprehensive picture of the hybrid learning environment, data were collected using both quantitative and qualitative methods embedded within formative and summative procedures from both the participants and the instructor (Creswell, 2003; Gay & Airasian, 1992). Data collection tools included demographic, and pre- and post-course surveys, a formative temperature check, qualitative interviews, reflective journals, and course records. These instruments were developed in consultation with experts in the field of eLearning, and with consideration to the conceptual framework. For example, a Likert statement such as “*The teacher needed to respond more quickly when I need information or help.*” collects data on the service construct. For ethical reasons, any personal information shared with me outside of an interview or survey question is not included to protect the identity of the individual participants.

Demographic Survey

A demographic survey was administered to the learners electronically. The purpose of the survey was to collect basic demographic information and identify participants' perceptions of computers and eLearning through 24 open- and closed-ended questions (Appendix H). The survey required approximately 10 minutes to complete. The data revealed key information about the unique needs of these learners, in terms of their external commitments and educational profile. Forming a collective profile of the learners at the onset of the hybrid course also served as a basic needs analysis allowing for adjustments to be made to the course. A summary of the demographics was provided to the instructor one week after the survey was administered.

Pre-Course Survey

The pre-course survey consisted of a combination of 12 open- and closed-ended questions. The pre-course survey was conducted during the sixth week of the course, after the first eLearning activity (Appendix H). It required approximately 10 minutes. The survey collected information about participants' expectations of the hybrid course. Learners identified their computer skills, anticipated time commitments and schedule for eLearning, and connected the hybrid course with their learning process. Appendix I reveals data collected from this survey.

Formative Temperature Checks

Temperature checks were designed to be administered at the end of the first and second months of the course as a program evaluation mechanism (Appendix H). The temperature check was comprised of 18 questions based on a 5-point Likert scale (strongly agree, agree, disagree, strongly disagree, not applicable) and five open-ended questions. The questions pertained to the course content, delivery, and support, as well as the learners' perceptions of the hybrid course. The data collected from these surveys were intended to guide formative adaptation and

improvement of the course. Only one temperature check was conducted during the second month of the inquiry; without extensive eLearning session, a second temperature check would not have provided valid information. Appendix I presents a summary of the temperature check data.

Post-Course Survey

In the post-course survey (Appendix H), learners were asked to reflect on their experiences in the course and provide a summative evaluation of the hybrid delivery model and the learning process. Eight quantitative questions solicited data on the participants' perception of computers and their related skills, while seven qualitative questions asked participants to connect the hybrid model to their learning process and define their ideal eLearning materials. Learner responses to the post-course survey are summarized in Appendix I.

Qualitative Interviews

Discussion groups were conducted to further reveal learners' experiences (Creswell, 2003). I probed into participant's perceptions within the key concepts of the framework: content, delivery, service, and the mature learner (see Appendix J). Five participants from each course section were invited to take part in two separate 45-minute, semi-structured discussion groups. Learners were purposefully selected based on multiple variations (Miles & Huberman, 2002). Based on input from the instructor and the formative data, interviewees were selected to represent different ages, abilities, and attitudes. Five participants were invited to each interview. However, on the day of the scheduled interview, only four participants in the first discussion group, and three in the second group were in attendance.

In two semi-structured 30-minute interviews, the instructor responded to a series of questions before and after the study (Appendix J). The purpose of the interviews was to collect the instructor's insights into the learners' experience. These interviews focused on her perception

of learner engagement, ability, and motivation in the hybrid environment. Mary planned to use interview transcripts and survey summaries to inform her teaching.

The interviews and discussion groups were audio-taped, with the participants' permission, and transcribed verbatim. Field notes were recorded to include descriptive and reflective data (Gay & Airasian, 1992). A transcript record was returned to all participants via email for their verification within two weeks of the interview or discussion group date. There were no revisions made by the participants. There were no subsequent individual interviews conducted.

Qualitative Teaching Log

The instructor and I kept our own reflective journals throughout the study. There was no set requirement for journal entries. Reflection within the journal provided a mechanism for the instructor to express some of the frustrations, successes, and expectations of teaching and learning in the hybrid course (Tillman, 2003). I also used my personal journal to note events and document interactions with the instructor and the learners in the classroom and online, as well as any emotions I felt as the study progressed. I accessed the eLearning environment throughout the course and visited the classroom on five occasions. The instructor's journal included 15 separate entries, while my own encompassed 23 entries over the entire study. The data were used in the interpretation of the learning experiences to corroborate or clarify the data provided by learners.

Course Record

Course artifacts were collected throughout the course, both from F2F and eLearning sessions. Artifacts from course activities included course documents, interactive components such as announcements, discussion postings, and emails, and course statistics. BlackBoard maintained a record of how the learners accessed and used eLearning components. These records

were available to me. The course statistics tool quantitatively tracked different usages within the virtual environment, in terms of what applications or pages the learners accessed and when they accessed them.

Procedures

During course registration in January, the hybrid sections of the course were advertised and an eLearning test was made available. The test guided potential learners to examine their technical and academic skills, along with their learning style, to make an informed decision about enrolling in the hybrid course. This approach was consistent with Kim and Bonk's (2006) findings that quality eLearning should encompass measures of learner readiness and trains learners to self-regulate their learning. Concurrently, learners were recruited to participate in the study; learners were also recruited during the first two weeks of class. A recruitment letter introduced the hybrid section of BTT2O and the possibility of participating in the research project. The letter, as well as the test, was distributed during the first week of classes by the instructor for those who had not yet accessed them. Two weeks later, I was introduced to the class to answer any questions, provide further information about the research, and interact with learners.

Participants were assured that collected data would be available only to me and that their anonymity would be maintained in any reports and publications resulting from the inquiry through the use of pseudonyms. More importantly, their participation in the research was acknowledged only to me; Mary did not know which learners were participating in the inquiry and which were not. On separate occasions, the instructor and I verbally emphasized that learners did not have to participate in the inquiry to remain in the hybrid course and that non-participants would receive the same support from her. This was intended to prevent any bias on the part of

the instructor towards participating or non-participating learners. The option to withdraw themselves and/or their data at any time without prejudice was also outlined to the participants both verbally and in writing on the consent form. I distributed and collected consent forms from all individuals, whether their form indicated an interest in the study or not.

During the classroom visit, I also observed the instructor reviewing Topic 1 (Introducing BlackBoard) and introducing Topic 2 (Communication Tools) within the F2F class (Appendix E). I worked with learners to help them set up their own email addresses and to guide those who needed assistance locating features within BlackBoard. I made notes on perceptions, ideas, and reflections from this classroom visit within my journal once the class period was complete (Bogdan & Biklen, 1998).

The following week, I returned to the classroom to conduct the demographic survey (Appendix H). I addressed the entire class to give verbal instructions for completing the survey. The survey was distributed to all learners within the classroom to maintain anonymity. Those who were not participating in the study returned a blank copy of the survey to the data collection envelope. A summary of the participants' demographics was provided to Mary two weeks later. The summary provided a description of the participants' backgrounds and abilities; it also initiated the process of analyzing and interpreting the participants' experiences. The summary was provided to Mary with the intent that she could modify course planning to suit emergent learner needs. For example, Mary used the absence of eLearning experiences among learners to schedule additional time to introduce eLearning environment. Beyond the schedule, Mary did not use the summary to further guide her planning. Later in the week, I returned after school to conduct the pre-study interview with Mary. During this interview, we discussed potential teaching strategies, and I offered suggestions for creating links between the F2F and the

eLearning environments. We also reviewed the BlackBoard implementation topics as an existing structure for constructing course tasks (Appendix E).

In consultation with Mary, the pre-course survey was conducted in Week 6 of the course after one eLearning session. At that time, I returned to the classroom and the pre-course survey was distributed to all learners to further maintain confidentiality. Again, I interacted with the learners to answer questions about the survey or to assist with the daily assignment. After the visit, I recorded observations connected with the skills of the learners and the instructor's comfort level in my journal.

After only two eLearning sessions were implemented, one temperature check was conducted electronically in late April (Week 11) in an attempt to encourage more eLearning sessions. The temperature check was conducted electronically during a F2F class, where learners downloaded the temperature check and emailed completed copies to me. Both the instructor and I agreed that only one temperature check would be conducted as only two eLearning sessions had been implemented. The data from the temperature checks were analyzed using the same procedure used for the first set of surveys.

Near the end of the study, I scheduled two final visits to the classroom to conduct the post-course survey and discussion groups. I observed the F2F environment on final time and thanked the learners for their cooperation throughout the semester, whether they had participated in the study or not. Appendix I presents the data collected from all surveys. I scheduled a subsequent date to return to the school a week later for the instructor's post-study interview.

Data Management and Analysis

Data analysis is described by Merriam (2001) as a process of meaning making. According to Marshall and Rossman (1999), the process is non-linear, ambiguous, and time

consuming. Both Merriam and Marshall and Rossman indicated that data collection and analysis typically occur concurrently in this type of study. With an unexpected evolution in course delivery, I found the process of data analysis even more demanding. This evolution will be discussed in Chapter 4. The data analysis and representation were guided by Creswell (2003) and Merriam (1998) and involved triangulation among the data sources, myself, and the theoretical underpinnings of hybrid learning (Stake, 2000).

Stake (2000) explained that since case studies require multiple data collection procedures, it is important to demonstrate the interrelatedness between the collected data and highlight disconfirming instances. Data management, reduction and coding all formed part of my data analysis process (Bogdan & Biklen, 1998). The initial stages of analysis involved managing the data into relevant files and tabulating any quantitative information. Immediately after each interview, survey, or classroom observation, I highlighted ideas and impressions in my journal, whether seemingly significant or otherwise. I approached the first reading of each transcript with an open mind, looking to discover “What were the data saying?”. I worked to understand the learners’ perspectives. Concurrently, tables summarizing the quantitative data were created in Excel to provide descriptive statistics for demographics, online access (i.e., applications accessed, frequency and times of access), and course components. These tables were also used in communication with the instructor. In addition, the use of Excel with the qualitative data (transcripts, survey responses and anecdotal observations) facilitated the use of jot notes, questions, tentative interpretations, and possible connections (Merriam, 2001). The combination of both quantitative and qualitative analyses began to build a picture of the experiences of the learners within the hybrid course. Subsequently, both tabulated data and transcripts were read and reread to form initial emergent codes through categorical aggregation (Stake, 2000).

Marshall and Rossman (1999) cautioned researchers against getting caught up in data management, otherwise unforeseen findings may be overlooked. Organizing the data in this manner gave me a starting point from which it could percolate. The participants and the course remained constantly in the back of my mind, often leading to several inspirations at unexpected moments. For example, while driving home one evening, I had to pull the side of the road to jot down a revelation about the influences of the school's environment on the instructor's perceptions during the course.

Approaching data analysis as an ongoing process from the onset of the study made it possible to go back and re-examine data from new angles or to disconfirm preliminary findings (Stake, 2000). The data did not slot neatly into categories; there were gaps and overlaps. With recurring data management, reflection, and discussion, congruent patterns consistent with the purpose of the research began to emerge (Merriam, 2001). As patterns were recognized, categories were assigned and linked together; some were specific, while others were tentative (Bogdan & Biklen, 1998). For example, the learner's proficiencies were readily apparent, while the role of the instructor had many interim phases. Disparate instances were highlighted while reading the data which helped refine or redefine the emergent categories. I would often revisit the categories and themes as new data emerged. The process also enabled the ongoing discussion between and among myself, the instructor, and the participants, as I would touch base at various points to clarify, confirm, and reject current interpretations. I also referred back to the research questions, the hybrid conceptual framework, and the DDLM as a guideline to explore themes and meanings within the data. After I felt that the percolation of the data into categories and themes was at a plateau, I turned to the literature to help expand my interpretations to form a comprehensive evaluation of learner experiences with the hybrid course.

Situating the Researcher

The main instrument in qualitative inquiries is the researcher. Consequently, the researcher may be a threat to the validity of the inquiry. It is important to consider the competencies and skills of the researcher. I am a secondary educator by training, however, I have worked in a variety of educational settings including elementary, secondary, and post-secondary as an educator, vice principal, educational consultant, and eLearning course designer. My diverse experiences have provided me with a broad understanding of the learner needs within a learning environment, as well as how to develop effective curriculum to meet their needs. I have had extensive experience in both developing and delivering F2F and eLearning courses. I have also had diverse experience in the design and delivery of workshops for instructors, as well as the development of curriculum resources at the board-wide level.

Epistemologically, I view technology as an exciting teaching tool within my range of teaching strategies. I have authored three post-secondary eLearning courses and integrated eLearning into my own teaching. My use of eLearning components ranges from the simple posting of course notes online to the use of discussion forums and eLearning activities (e.g., learner homepages, online assessment tools/activities). I have also taken numerous eLearning courses. All of these experiences have developed a keen sense of the benefits, challenges, and management of the eLearning environment. On a professional level, I view instructors as lifelong learners, constantly working towards improving teaching practice with the start of each new course. In this regard, my ability to offer guidance and support for the instructor in the development and delivery of a hybrid course and for the learners in their completion of course activities was well developed.

My reflective educator-self has long questioned the validity of implementing eLearning at the secondary level. I question whether learners at this level possess the skills and discipline to be successful within this type of learning environment. My concern arises from the bandwagon approach to eLearning, where Ontario school boards and the Ministry of Education appear to be motivated to develop eLearning courses by cost savings and/or a current curriculum trend. I view a hybrid learning environment as one that may balance the needs of this distinct group of adult learners, providing both personal contact and academic freedom within one course. The chance to explore a hybrid learning environment from both the learner and instructor perspectives was an opportunity I could not miss.

I was familiar with the school and the teaching environment where the course was offered, which facilitated my presence as an observer and as a consultant. Although I had created a framework for course development and made myself available as a consultant during the course development phase, I did not develop or deliver the course, nor did I teach any classes. I was able to observe course development and delivery, while offering information and opinions. The final decisions and actions for how the course was designed and implemented rested on the shoulders of the instructor.

Soundness of Findings

In the literature, numerous strategies for ensuring trustworthiness of research findings are suggested. Stake (2000) suggested triangulation and member checks within case studies. Member checks were facilitated by classroom observations and electronic communication. Once survey data were summarized, I shared both the summary and interpretations with participants. They were able to confirm or provide further insight into building a meaningful picture of the hybrid course experiences.

Lincoln and Guba (1985) advocated four criteria to ensure trustworthiness: credibility, dependability, transferability, and confirmability. In 2000, Lincoln and Guba recommended asking “Are these findings sufficiently authentic... that I may trust myself in acting on their implications?” (p. 178). I used a number of strategies to enhance the credibility of this study. First, the ongoing dialogue between participants and me facilitated member checks at various stages (transcripts of data, summaries of data, and drafts of interpretations) of the study. Classroom observations provided a natural opportunity to gain participant feedback on a recent interpretation, while numerous emails and phone calls with Mary established a continuous feedback loop on both the course and the learners’ experiences, along with my interpretations. Second, course data were collected over a period of four months. This spans 80% of the course timeline, offering broad data spanning the learners’ entire course experience. I also collaborated with Mary over a number of months during the course development phase and recorded reflections in my journal. Third, seven data sources (questionnaires, surveys, interviews, discussion groups, journals, observations, and course artifacts) were used to represent different views of the same experience. The multiple sources also support dependability. This overlapping of data collection was used to organize what Yin (2003) calls a case study database. Lastly, by outlining my views and involvement, along with the theoretical parameters of this inquiry, readers should be able to situate me within the study. By adopting case study methodology, a rich thick description facilitates judgments of transferability, where readers make their own inferences (Wolcott, 1990). This report incorporates in-depth descriptions in which the participants’ voices are prominent, with findings evolving from an analysis of both qualitative and quantitative data. Information from the data offer opportunity to learn from the case or further apply it to a population of cases (Creswell, 2003). Triangulation increased accuracy of

analysis. For example, data on the proficiency of the learners was collected via self-identification on surveys, instructor perception in her journal and my own F2F and eLearning observations.

This overlapping of data collection represents different views of the same experience. All artifacts have been kept in a secure location: raw data (e.g., surveys, transcripts, journal entries), data reduction and analysis products (e.g., codes, emergent categories, themes), and process notes (e.g., researcher journal).

Chapter 4: The Characters, Context, and Course

The data within this study includes 200 pages of survey data, 30 pages of interview transcripts, 15 files of course artifacts, two electronic journal files, and 60 emails. Within this chapter, these data sets are interwoven into a description of the research participants, both the learners and the instructor. Next, the instructor's perceptions of hybrid learning are exposed. As the course was delivered, the complexities of hybrid learning were revealed as the contextual layers in which it was nestled were peeled back. Factors that facilitated and, more significantly in the present study, factors that inhibited the implementation of the hybrid modality of the course are exposed. These set the stage for the analysis and interpretation of the course experience to answer the question "What is going on here?" as suggested by Wolcott (1990).

Participant Profiles

The participants in the study played important roles in the hybrid course experience. Their individual perspectives afford a unique view of the case. The participant profiles presented provide a sense of who they are and allow the reader to appreciate the experiences of these participants and the decisions made by the instructor on their behalf.

The Instructor

At the time of the inquiry, Mary had been teaching at the school for two years. While she had no previous experience with online teaching, she had strong technical skills. She had previous work experience as an Educational Technology Integrator (ETI). The role of the ETI within the board was to enable instructors to integrate technology into their teaching environment by both conducting professional development and creating learning objects for instructors. To this end, Mary had collaborated in the creation of a learning resource website for instructors and delivered BlackBoard training workshops. Mary was highly proficient using

technology and the course management system; she seemed to be an excellent match for piloting a hybrid course.

Mary was qualified to teach the primary (K-3), junior (4-6), and senior (9-12) divisions; social science was her teaching subject specialty. She was also qualified in Computers in the Classroom and Cooperative Education. She had previously taught BTT2O in two separate semesters. In order to make an informed decision about teaching the BTT2O hybrid course, she consulted with the department head, the school's principal, and me regarding the BTT2O hybrid course. During the 2006 winter semester, Mary was assigned two sections of BTT2O and one section of grade 12 computers.

The data for the two sections of the course were combined and analyzed together. Mary maintained a consistent approach to curriculum delivery; teaching the same topics on the same days throughout the semester. The pedagogical decisions she made were identical in both sections, including her teaching and learning strategies (assignments, due dates, teaching materials), assessment and evaluation of student work, and implementation of eLearning.

The Learners

The 62 learners who registered for the BTT2O hybrid pilot were divided into two sections. Thirty-seven individuals were registered in Period 2 and 25 were registered in Period 3. Of the 62 learners registered in BTT2O at the beginning of the semester, 42 received their credit at the end of the semester (68%). Forty-one of the 62 registered learners volunteered to take part in the study. Mary revealed that most of the learners who did not receive credit had dropped the course before the end of the semester. However, as the study progressed the number of participants who completed the surveys decreased (see Table 1). Only eight learners completed all four surveys. While participants were contacted via email if they were absent on the day of

the survey, only five surveys were returned through these efforts (this 10% response rate for all learners). There was no indication from these learners that they had opted to withdraw from the study; there was simply no response.

Table 1.

Number of surveys completed at each stage of the research.				
	Survey 1 (<i>demographics</i>)	Survey 2 (<i>pre-course</i>)	Survey 3 (<i>temperature check</i>)	Survey 5 (<i>post-course</i>)
# of respondents	41	33	12	10

The initial information from the demographic survey provided an essential glimpse into the adult secondary classroom and set the stage for understanding learners' experiences with hybrid learning and the BTT2O course (Table 2). Mary seemed to base many of her decisions on the diversity of learners in her classroom and the profile of the class presented below provides a context for understanding these decisions. Following the profile of the class as a whole, individual learner profiles are presented.

As a whole, the BTT2O learners came from diverse backgrounds with varied needs and perspectives. Table 2 provides a summary of the demographics of the BTT2O classrooms. 62% of learners were in their late teens and required less than four courses in order to complete their OSSD after being out of school for less than a year. The learners spoke fourteen different native languages. While English was the predominant native language ($n = 13$), many of the other languages (Somali, Chinese, Farsi, Kirundi, Twi, Tigrina, and Portuguese) were spoken by only one or two learners. Within the BTT2O classrooms, two-thirds of the learners were classified as English-as-a-second-language (ESL) learners.

Table 2.

Demographic survey (n = 41; 19 female, 22 male) – Respondent Profile			
Personal Profile			
Age	Gender	Native language	
18 - 24 years old (62%) 25-29 years old (15%) 30-39 years old (21%) 40-49 years old (2%)	- Male (54%) - Female (46%)	- Ahmaric (5%) - Albanian (2%) - Arabic (12%) - Cambodian (5%) - Chinese (7%) - Dari (2%) - English (32%)	- Farsi (10%) - Kirundi (2%) - Portuguese (2%) - Somali (5%) - Spanish (7%) - Tigrina (5%) - Twi (2%)
Marital status	Living accommodations	Mode of transport	Commute time
- Single (71%) - Married (16%) - Separated (2%) - Dependent children (11%)	- With family (70%) - On their own (30%)	- Walk (10%) - Bus (65%) - Car (25%)	< 30 minutes(50%) .31-60 minutes(28%) > an hour (22%)
Academic Profile			
Past indicators	Absence from school	# credits remaining	# courses this semester
- Positive (57%) - Negative (43%)	< 1 year (41%) 2 years (26%) 3-5 years (20%) 6-10 years (13%)	- completing OSSD (86%) - learning needs (14%)	2 courses (5%) 3 courses (78%) 4 courses (17%)
Learner descriptors			
- I am 20 years old and my family live in Canada only one sister live in my country, Kosovo that's where I am from. I have been in Canada for 7 year. - I am organized, and I like improve and learn things news. - very distractive and need to practice often to get properly - Attends class 9 out of 10 times, pretty good marks - Impatient, kind, polite - Nice, outgoing - average learner - A lot to do every day out of school and too much to think about - Good listener, pick things up quickly - I am not a really very good on my courses but I am OK - am easy going I love coming to school			
Computer Profile			
Access	Type of Internet access	Previous online experience	
- Home computer (88%) - Home Internet (78%) - Email address (88%)	- High-speed (89%) - Dial-up (11%)	- F2F only (88%) - eLearning (15%)	

With respect to technological skills, 70% of the learners rated themselves as proficient using a computer; this statistic breaks down into intermediate (35%), experienced (23%), or super users (12%) of computers. Proficient was defined as being comfortable using a variety of software programs and able to troubleshoot computer-related problems independently, while also

being able to offer assistance to another computer user. The remaining participants (30%) did not consider themselves regular and proficient computer users or did not feel comfortable using computers on their own. In terms of Internet use, 65% of learners indicated that they were experienced with searching for information via the Internet; 88% indicated using the Internet more than once a week. In doing so, only 41% rated themselves as experienced with using Internet software programs like Explorer or Netscape. The majority of the participants had access to both a computer (88%) and the Internet (78%) outside the school. Only a small number (15%) of learners had previous experience with an eLearning environment (e.g., with a course-management system as a tool within a F2F classroom).

While these broader statistics give a sense of the diversity of learners within BTT2O, I undertook a closer look at the profile eight specific learners. In the profiles that follow, the original spelling and grammar of the participants is maintained in order to communicate their “voices” as accurately as possible. Table 3 presents the data collected for these eight learners.

Harriet. Harriet had stayed at home for 24 years to care for her children until her husband unexpectedly passed away. This left Harriet with a need to support herself and, in her late forties, Harriet enrolled at the adult day school to complete her OSSD. She does not consider herself a “normal student”. Harriet was using her RRSPs to fund her return to school and indicated that she would need to get a job in the subsequent school year as her money was running short. Her goal was to obtain a job with the government agency she had worked with in the early 1980s prior to having children, as well as in contract positions in the interim. Working for the government would allow her to buy back pension time.

Harriet expressed a desire to attend college, but felt her transcript was missing higher-level math credits. Acquiring these credits would require further time in secondary school and

Table 3.

Learner Profiles (n = 8, 2 female, 6 male)				
Pseudonym	Native Language	Personal Profile	Additional information	Post-course plans
Harriet	English	late 40's widow no job	- stayed at home to raise children - husband's passing = revision of her employment status - using her RRSP's to finance completing her OSSD; might need to return to work instead of completing OSSD	Workplace or high school (needs more math credits)
Fareed	Farsi	early 30's single part-time (40)	- has previously attended high school in his home country - improving his English skills through OSSD courses after attending an ESL college when he first arrived in Canada	University (geography or international studies)
Norm	English	late 20's single part-time (20)	- past difficulties with school led to an incomplete OSSD - previously attended an alternate high school	Workplace (starting up an Internet business)
Mustapha	Arabic	late teens single part-time (20)	previous high school had closed and he had struggled to enroll in a new one	College (construction / civil engineering)
Meng	Cambodian	late teens single part-time (15)	indicated that he liked computers	None given.
Shen	Chinese	late teens single part-time (27)	- shared little personal information - indicated that he was not comfortable working in a classroom with others	College (heating & air conditioning)
Maria	Spanish	late teens single part-time (30)	- had previously attended an alternate high school - past experience with an eLearning course	Workplace (hair salon)
Ahmed	Arabic	late teens single part-time	- struggled with time management - previous eLearning experience	College (business accounting)

Harriet was not confident that she would be able to balance her financial situation in order to achieve her educational goals. Harriet was intrigued by the flexibility that hybrid learning would afford her given her family and personal commitments. She intended to access course work via high-speed Internet on her home computer and realized that it would maximize both her time and that of the instructor.

Harriet questioned whether the hybrid modality would lead to frustration when she had questions for the instructor, stating “I like them being right there to answer my questions. Not having to [say] ‘geez, well, I [will] ask that question on Thursday’ (discussion group)”. Harriet also expressed that she appreciated that “I like them [the instructors] explaining it. I like the visual, they walk you through it first (pre-course survey)”.

Fareed. Another of the older learners in the study, Fareed was a single 32 year old male whose native tongue was Farsi. He lived at home with his parents and worked 40 hours a week at his job. He did not indicate where he was employed. He commuted to school in under 30 minutes using his own car. Fareed was working towards completing his OSSD. He was taking three courses during the semester: English, Art, and BTT2O. On his pre-course survey, he reported his goal was to increase his earning potential, indicating that he hopes to attend university to study geography or international studies. As a learner, Fareed explained that he is “a friendly classmate that is very busy outside [school], sometime can not make it to class (demographic survey)”. He went to secondary school in his native country and enrolled in a college ESL program upon arriving in Canada. He had no previous experience with eLearning but had high-speed Internet at home. He viewed the possibility of hybrid learning as providing opportunity “to know more [options] of what [teaching methods] can be offered to learn (pre-course survey)”, although he

did perceive eLearning as “less contact with [the] instructor and stepping closer to machinism [where computers take over] (pre-course survey)”.

Norm. A Caucasian male in his late twenties, Norm lived with his family and worked less than 10 hours a week outside of school. For eight years, he had attended an alternate secondary school; he had struggled with the perseverance required to complete his courses. He subsequently enrolled at the adult day school to complete his OSSD and traveled 30 minutes by bus each day to get there. He planned to open his own Internet-based business after graduation. Norm had chosen to take BTT2O because it was an elective credit that would count towards his required 30 secondary credits. He was taking three other courses at the same time. Norm described himself as an attentive learner who enjoyed working alone and with peers. He viewed hybrid learning as a chance to work at his own pace, as well as learn more about information technologies. Norm equated eLearning with the wave of the future. Despite Norm's excitement about eLearning he also indicated the need for F2F learning to keep him grounded in his own course work. He wanted immediate answers to his questions and felt that eLearning meant a delay in having his questions answered. He had a computer with high-speed Internet at home but also planned to use the available computer labs to access the eLearning environment.

Mustapha. In his late teens, Mustapha was from the Middle East and spoke Arabic at home with his parents. He commuted less than 15 minutes in his own car to school and was not employed. With the closure of his former high school, Mustapha had been out of school for a year, not wanting to move to a new learning environment. It took a few months of convincing from friends for Mustapha to enroll at the adult day school to complete his OSSD. Despite these challenges, he stated “my experience with education is going good (demographic survey)”. He

had registered for four courses during the semester in order to complete his secondary education expediently.

While he did not have an email address, Mustapha had both a computer and high-speed Internet at home. He also planned to access the eLearning environment from the school's computer lab. He indicated that the combination of online and F2F learning would allow him to "schedule my time". He also saw it as an opportunity to build skills that he would need once he attended his local college: "I'll be going to college, ... my friend told me that they practice [use] that [computers] every day so ... I'm ... going to try to get better for the college (discussion group)". He did not perceive any challenges with this combination of learning environments. With the completion of his secondary education now within sight, Mustapha was looking ahead to a civil engineering college program.

Meng. Meng was one of two Cambodian learners in the study. In his late teens, Meng lived at home with his parents and worked 15 hours a week on top of his school work. His commute to school via bus took 15 minutes. He had been out of school for a year and was working towards completing his OSSD by taking three courses the semester of the study. His singular goal was to finish high school.

Meng did not have previous eLearning experience. Although he indicated that he had his own computer and high-speed Internet at home, he also planned to access eLearning components of the course from the school. He appreciated the independent learning afforded by the eLearning components of the hybrid course balanced with the "instructor being there to help me in the classroom (discussion group)". He also saw the course as an opportunity to learn about different software programs. At the same time, he expressed concern over "not knowing what to do online (pre-course survey)". Conversely, Meng specified that the classroom was not always

ideal because there is “limited time to do work, sometimes [the] instructor [may be] busy teaching others (discussion group)”.

Shen. One of three Chinese learners in the classroom, Shen was a man of few words. For example, he did not responding to many of the open-ended questions on the surveys and volunteered little information during the discussion groups. In his late teens, he lived at home with his parents and extended family. Outside of school, his job required 25 hours each week. He was able to walk to school in less than 20 minutes and he was taking BTT2O to get an additional optional credit. He planned to apply to a heating and air-conditioning program at a local college.

He would be able to access eLearning components through high-speed Internet at home. He did not have any previous eLearning experience but felt that the eLearning sessions would allow him to stay at home, especially in the winter, stating “I have a lot of family responsibilities (discussion group)”. He also felt that the “future would be like [online learning]”, indicating “I think the online stuff would be good for testing knowledge and everything (discussion group)”. He did not express any disadvantages to the hybrid approach.

Maria. Maria balanced 30 hours of work each week with her studies. She commuted for 20 minutes daily on the bus to school. She was Spanish-speaking and in her late teens. Maria was taking the final two credits towards her OSSD after being absent from school for one year. She had previously attended an alternate high school in a different school board where a number of their courses had been online. She considered herself to be proficient at using computers and associated software programs.

Maria planned to access the eLearning environment frequently (4-5 times) throughout the week through high-speed Internet at her home computer or at school. However, she questioned whether she would have the necessary software to access the eLearning environment. She felt

that the hybrid course would meet her needs. The eLearning sessions meant she “would be able to work around my job schedule” and in the classroom she would be “able to ask the instructor questions and get one on one help if I need it (pre-course survey)”.

Ahmed. Ahmed, who was in his late teens, expressed his time management challenges up front: “I wake up really early, I have a car, yet I barely make it to school on time (early is 7:00 AM) (demographic survey)”. His commute by car was an hour or longer in each direction. Living at home with his parents, Ahmed also had to balance his employment commitments within his weekly schedule. He described himself as an ambitious and very productive learner and was taking three courses to complete his OSSD. He intended to apply to a college Business Accounting program.

Ahmed indicated that he had some previous eLearning experience, which may have helped him understand the communication mechanisms within the combination of online and F2F learning: “If you have a problem, you can always email and ask. Or if you see them in the class, you can always ask. You have a bunch of questions and you just get to ask all of them (pre-course survey)”. He felt that the combination of online and F2F learning would be a benefit to him because he was often absent from class. He also knew the eLearning environment would mean “I have no excuse when I miss a class”. Furthermore, Ahmed realized that acquiring eLearning skills would benefit him in his transition to the college environment: “Yeah, my friend goes there and uses it [BlackBoard]. It's amazing how it is. He even hands [in] his [assignments] in to BlackBoard. (discussion group)”.

The Instructor and Hybrid Learning

Having never taught a hybrid course, Mary explored curriculum expectations, goals, and her own thinking prior the onset of the course. She turned to both the department head and me as a resource at various points.

Course Preparation

In terms of initial course design and planning, Mary and the department head collaborated over two semesters to define what they wanted a hybrid course to look like. They asked themselves, “How can we improve the learners’ experience through hybrid learning?” and examined how classes and related activities could be designed to take advantage of the medium in which they are offered. They decided eLearning sessions would focus on the acquisition of knowledge and skills. For example, a given text online would be read by learners to build their vocabulary. Conversely, classroom learning would focus on the introduction of skills, such as the basic features of PowerPoint or the consolidation of learning through summative activities. For example, a classroom activity directing learners to create a holiday-travel presentation would incorporate technological skills and acquired vocabulary, as learners would be required to import graphics and integrate text. Mary planned to create online quizzes to check for understanding and make postings within a discussion forum. The intent of these activities was to take advantage of the features of BlackBoard so learners could check and recheck their understanding in a low-risk environment.

Mary made the final decisions regarding the BTT2O course delivery, both in terms of the content and the modality. She planned to use BlackBoard throughout the course. Before the course started, Mary indicated that one way she would use the technology was as a communication tool with learners in her class. Mary stated, “whether or not, we are in class or

online, I am going to put a weekly overview of the steps that we are doing all week, so that it's a place to go to find the assignments on an online day or a regular day (pre-study interview)".

Mary also aimed to integrate BlackBoard into the course by building on successive tasks. Her focus seemed to be on learner success from the onset, rather than on the complexity of the task: "Can they do this the first time? So I'm making the actual assignment of the day quite simple, quite low-end (pre-study interview)". She also indicated that initial tasks would focus on enabling learners to become proficient with basic technical skills, such as downloading documents, completing tasks with a file, and uploading the same file for submission, and with with BlackBoard, such as posting within the discussion forum or using the quiz function.

Mary created reference materials that she posted within BlackBoard as a starting point for building the learners' knowledge and skills online (see Figure 4 for a screen shot of the tutorials). For example, she created software tutorials for BlackBoard and Microsoft Word, Excel, and PowerPoint. However, in terms of eLearning tasks beyond the first week of classes, Mary indicated "I haven't structured it yet (pre-study interview)". She seemed to have ideas in place, but no concrete learning materials for the eLearning environment.

Beyond Secondary Learning

In the pre-study interview, Mary explored her reasons for selecting to teach via a hybrid modality in the context of "how is this good for learners?" She made connections with post-secondary learning: "They will all experience...Blackboard or another learning management system in university or another college....Just being exposed to it [will] help them be successful later on...". At the same time, Mary recognized advantages for acquiring technical skills among learners heading into the workplace; she identified that some employers used eLearning as part

of their training programs. Learners who possessed eLearning skills would be prepared not only for college but also for the workplace.

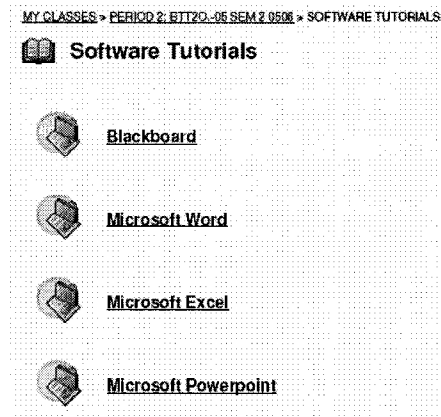


Figure 4. Screen shots of support materials available within BTT2O eLearning environment.

Mary also indicated that the absence of the instructor during eLearning sessions would benefit the learners' skill acquisition. She reflected that "having the instructor there is a detriment because they just ask the instructor, as opposed to going and figuring it out themselves (pre-study interview)". She further explained:

The eLearning environment would necessitate the development of their trouble-shooting skills....[They can use] the handout, or the PowerPoint presentations, or help sections to help them answer their own questions rather than relying on me. This will be something they will have to do as they progress through their education (pre-study interview).

At the same time, Mary acknowledged the range of learners in her classroom, noting some learners may require differentiated instruction in the areas of language, computer skills, or work habits. She felt the eLearning sessions would provide ESL learners or lower-achieving

learners the additional practice they needed. In turn, this experience would provide these learners with an opportunity to improve both their academic outcomes and their approach to learning:

There is a very big range in the abilities and the confidence and the language level [of the learners]. All of these factors contribute to the need for someone [to be] there to answer their questions...because they are at so many levels, it's just really nice to have another place to go to. It'll give the ones that are lower end, I think they especially...need practice. For them, if they don't get any experience, they are going to have a really hard time having to do this later on (pre-study interview).

Mary also felt the hybrid modality would help learners juggle their commitments, noting that at first they might need guidance in terms of time management. Mary defined a group of learners with good work habits as those who would be able to juggle the demands of their busy lives, “perhaps they don’t come to class, and yet, if it's online, they can actually get their work done”. Mary expressed optimism that in presenting them with learning opportunities to build their time management skills they would ultimately benefit:

Even if they make a few mistakes and don’t manage their time well, they'll see how it impacts on them. Again it's exposure to having to deal with things like that. So hopefully, we might teach them some time management skills in the long run (pre-study interview).

There was also a realization that the combination of F2F and online learning provided a safety net for learners where “they know they can come back the next day (pre-study interview)”.

Mary recognized that the transition to hybrid or even eLearning sessions would not be seamless: “Although it might be difficult for them at first, I think we are doing them a favour to expose them to it”. However, Mary imposed a loose timeline on the transition period and stated, “If we try it [and] after a few weeks they ... really...don't feel good, we're not going to push

them to keep going (pre-study interview)". Mary expressed a degree of hesitation for some learners and questioned "Are they going to be able to do this?" Mary's main concern resided with the ESL learners and the eLearning environment: "I think that in terms of questions over email, or questions in a discussion board, it may be difficult for a lot of these learners to put their problems into words, especially with a language barrier (pre-study interview)".

Getting Started

The Beginning

The course began January 31 , 2006. Mary scheduled a F2F introductory period for the first three weeks of class; this period would introduce the features of a hybrid course, including the eLearning environment within BlackBoard. Subsequently, eLearning sessions would take place twice weekly where learners could complete their work online at anytime and from any place. At the end of the third week of classes, I observed a F2F session; Mary was familiarizing learners to BlackBoard. She facilitated as learners logged into BlackBoard and checked course announcements (see Figure 5 for a screen shot of Mary's announcement screen). In a previous lesson, Mary had described BlackBoard access and features. There was a buzz of excitement among the learners as they started to login. Exclamations such as "I'm in!" and "This is so cool" were heard around the classroom. Mary had a peer helper in the class who, along with me, circulated around the classroom ensuring the learners were logged in properly and were able to access the designated pages. Mary then introduced the communication tools (discussion forums and email) by asking learners to send an email to her within BlackBoard and post a welcome message in the discussion forum she had created. Both the peer helper and I circulated the classroom to assist any learners who needed help accessing BlackBoard or using the

communication tools. Mary closed the lesson by describing more of BlackBoard's features, the assignments, the reference materials, and the quizzes, without having learners access them.

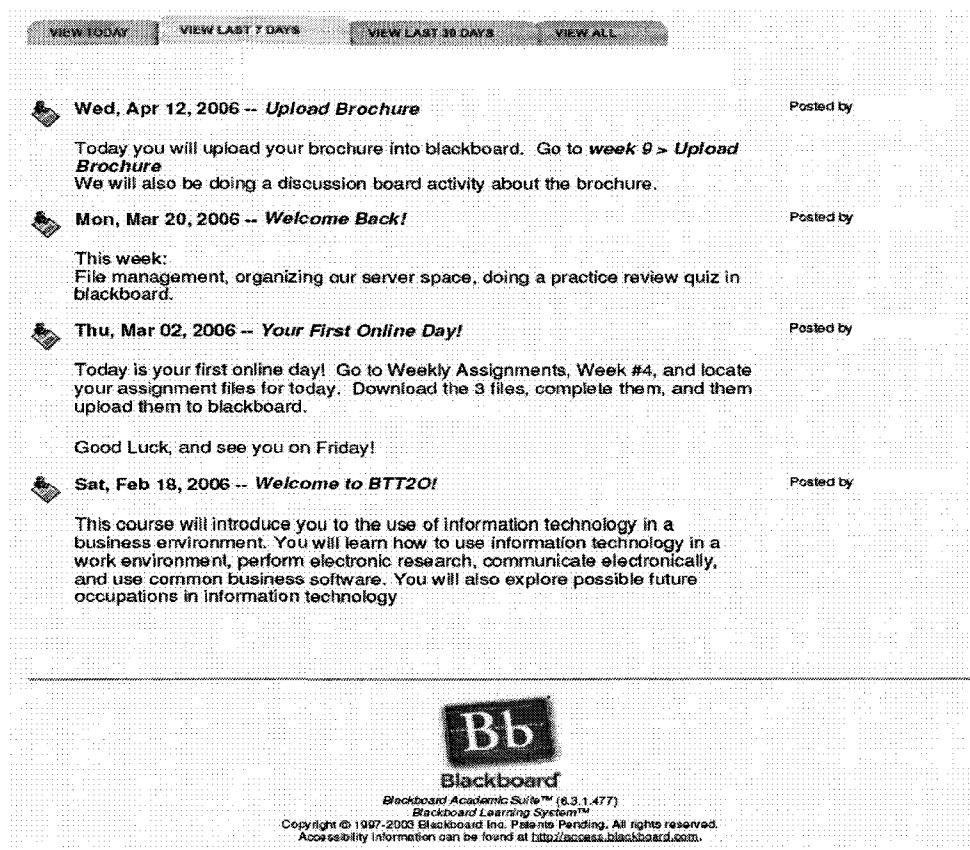


Figure 5. Screen shot of the announcement screen in BlackBoard.

After 3 weeks of class, I received a phone call from Mary, who expressed concern about implementing eLearning sessions. Together, we decided to delay the first eLearning session until Week 5. As the first eLearning date approached, Mary integrated more features of BlackBoard into her F2F sessions. Learners completed an online practice multiple choice quiz about the features of a computer during a F2F session. Learners entered responses to questions and submitted the quiz. Mary set the quiz functions to automatically provide feedback to learners on which responses were correct and incorrect, and giving comments or suggestions associated with the response. Mary had inputted these comments.

The first eLearning sessions directed the learners to complete a quiz (see Figure 6 for a screen shot of the practice quiz). Learners were given the option of completing the quiz at school or at home, as long as they accessed BlackBoard and completed their quiz prior to following F2F session. The quiz was set for multiple attempts, allowing the learners to retake the quiz until they were satisfied.

Mary focused F2F sessions on tasks that fostered learners' computer skills. The tasks were software-based assignments. Mary structured her course to focus on one software program per week. For example, during my first observation in Week 3, the class was focused on PowerPoint. Learners were creating a PowerPoint presentation on travel as a culmination of a series of lessons exploring the features of the software program.

During Week 5 Mary added the Assignment DropBox feature to the BlackBoard learning environment. She created an assignment that required learners to research the history of the computer and write a summary of their findings. Learners were to submit this assignment electronically using the Assignment DropBox feature. In a previous F2F session, Mary had already reviewed the process of uploading and downloading assignments with learners, as well as examined the requirements with learners. Following the due date of this assignment, she found a subset of learners, "in most cases the low ESL learners" had struggled to upload their files and instead opted to email them. Mary used part of the following day to review the submission process. She found the entire process "took much more time than I had expected for the learners to master this skill in blackboard". She also found an unexpected limitation with the Assignment DropBox: learners were not able to revise submissions nor add additional files once they had submitted a file. She explained that she "had cases where a learner realized they attached a file that was not complete or a corrupted file and wanted to re-submit (teacher journal)". While other

MY CLASSES > PERIOD 2: BTT20_05 SEM 2 0506 > CONTROL PANEL > QUIZZES > PREVIEW ASSESSMENT BTT20: PRACTICE QUIZ

Preview Assessment BTT20: Practice Quiz

Name: BTT20: Practice Quiz

Instructions: Today we will do a practice quiz. You will be able to try more than once to get the correct answer. Keep trying until you do get that answer though! This is a great way to study for the real quiz next Monday!

Multiple Attempts: Not allowed. This Test can only be taken once.

Force Completion: This Test can be saved and resumed later.

▼ **Question Completion Status:**

Question 1 10 points Save

What is the keyboard shortcut for "undo"?

- ☐ CTRL + A
- ☐ CTRL + Z
- ☐ CTRL + O
- ☐ CTRL + S

Question 2 10 points Save

What does WWW mean?

- ☐ wild wierd wacky
- ☐ wow wide web
- ☐ world wide web
- ☐ why waste water

Question 3 10 points Save

This is the extension added to microsoft word files.

- ☐ .ppt
- ☐ .jpg
- ☐ .html
- ☐ .doc

Figure 6. Practice quiz in BlackBoard.

course-management systems allow the instructor to set the number of times a submission can be made, this setting was not available in BlackBoard. Mary “had to re-create another assignment called ‘re-do assignment number one’ (researcher journal)” to enable learners to resubmit their files as necessary. In her journal, Mary reflected, “I am feeling right now that because of the skill level of my learners, I won’t be doing as many online days as originally planned”. She explained, “I will need some time to mark their assignments and set up the next online assignment”.

Developing a Common Understanding

The learners started to define for themselves what a hybrid course would look like and how it would support their learning process. In terms of meeting their needs, Norm explained

that he could use BlackBoard to keep track of his course materials, rather than juggling papers in a binder. Norm found the work “straight forward and easy to understand. It was interesting work (didn't feel like school work)”. Maria expressed that she was not “afraid of making [asking] silly question in front of others...” as she could send her questions via email to Mary. Norm was excited about working electronically and reducing his class time commitments, whereas Mustapha saw the potential of multiple attempts in the online quiz to improve his learning.

Learners indicated that Mary was providing quality instruction in the F2F environment. In the temperature check Ahmed wrote: “as for my current instructor, I find her very knowledgeable and willing to spend the extra time with any learner who requires it. Class instructions, hand out and one on one”. Maria felt that the combination of online and F2F work was moving her towards a feeling of convenience and independence, offering her “more flexibility with my time / instructor available as needed”.

At this stage of the course learners indicated that they were not receiving sufficient opportunities to experience the balance of F2F and eLearning. Ahmed expressed this notion when asked how the course could be improved: “if it could be used at home”. Mustapha supported this view by stating, “It can be improved if maybe we had a couple days off school so we can actually try it from home and see how it is learning from home”. Maria also shared this sentiment, indicating that hybrid learning could have been improved “perhaps if it were implemented”. Shen felt that he needed further “understanding using eLearning course” within his course experience. At the same time, learners acknowledged that the range of abilities within the classroom served as a barrier to full hybrid implementation: “some how learners should be forced to go online because otherwise it is very difficult to go online for learners like me having a full time job and school” (Fareed).

Change of Plan

Mary's Resistance

During a second frantic telephone call in mid-March, Mary expressed concern over being able to deliver any further eLearning sessions. She wanted to diverge from the proposed timeline but felt as though she would be “failing the pilot project” by doing so. Mary felt that a subset of the learners in the course lacked the necessary language and computer skills to function independently in an eLearning environment and would get frustrated: “I really feel that it is almost impossible with the ESL group [doing a hybrid course], they would even have an extremely hard time answering those questions”. In the F2F setting Mary indicated that learners repeatedly asked her how to upload, download, or save files and she was concerned that this would be a huge barrier if they introduced days where the learners did not have to come into class but instead would do all their work online. This also took more time away from Mary's classroom teaching time.

Shifting Along the E-learning Continuum

Mary and I collaborated to establish an alternative schedule and slower approach for integrating the eLearning sessions. Mary planned to integrate BlackBoard into her F2F teaching by having learners check daily course announcements, download assignments, and submit work electronically. Mary would focus on the systematic use of the discussion forum over a period of three weeks, rather than one week as planned. The first week would involve the use of BlackBoard discussion forums during F2F instruction. The second week would be the use of discussion forum on the school's computer, but with Mary only accessible online. An online discussion would be conducted during the third week where learners could contribute from any location at any time. In one attempt to use the discussion forum in a F2F session, Mary directed

learners to post their assignments to a discussion forum, and comment on each other's work (see Figure 7 for a screen shot of the discussion forum). Only 6 out of 61 learners posted to the discussion form. Mary expressed frustration and disappointment at this stage. Mary also revealed that there had been a problem with the plug-ins required for the discussion forum, stating that some computers had not been setup properly. She was able to troubleshoot this problem, in collaboration with her peer tutor and the school board's technical support team.

Despite this revised plan, I received a number of emails or phone calls from Mary indicating that she had delayed eLearning sessions; "I've moved the online day back a week (personal communication, February 27, 2006)". By the end of April, Mary had implemented only two eLearning sessions - instead of the original two eLearning sessions per week. This required learners to be in class daily according to their scheduled class times. Mary had eliminated the prospect of eLearning entirely by this point in the course.

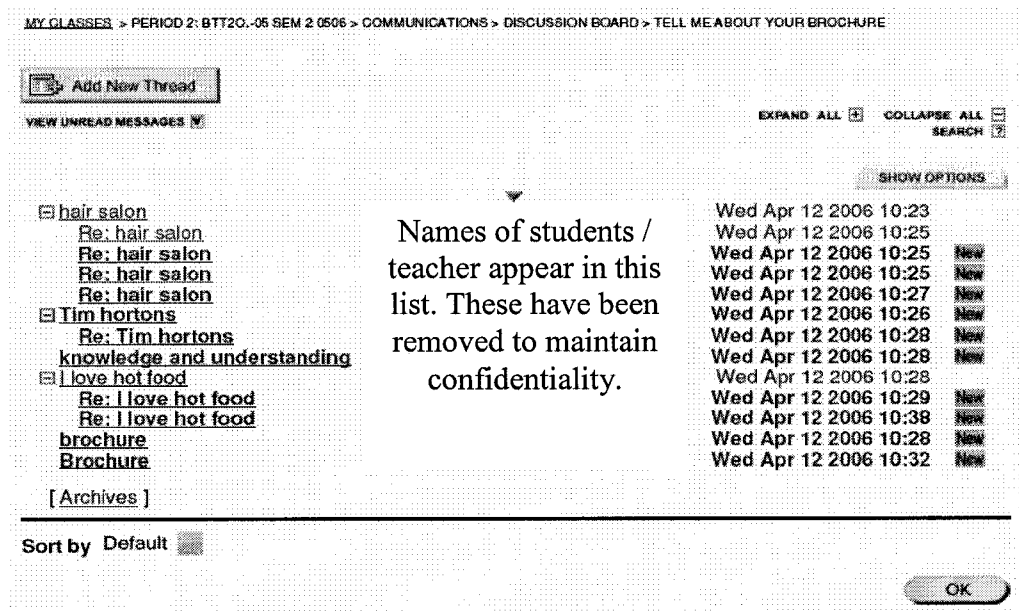


Figure 7. Sample Discussion Forum in BlackBoard

Looking Back

With only two eLearning sessions delivered during the hybrid pilot study, the collection of extensive information about the learners' experiences with hybrid learning was restricted. However, both the instructor and the learners offered reflective data on hybrid learning, even with their limited experience with the modality.

The Disconnect

A disconnect seemed to exist between the learners' attitudes and Mary's choices regarding the delivery of the course. Many learners shared feelings of regret that they had not been given the opportunity to experience a fully hybrid course. Norm noted, "we didn't really get to experience the hybrid course from home, maybe if we had time off school to try it, it would have been fun". Similarly, Ahmed stated, "It [the course] can be improved if maybe we had a couple days off school so we can actually try it from home and see how it is learning from home". They also expressed the benefits of hybrid learning in the context of their own lives. Mustapha indicated, "for me it would have been convenience and saving some time or extending the time of study if I had time to go online". In the temperature check, Maria reported:

ELearning courses are convenient and easy once you know how to use them. Especially for saving time. You are using your time for your assignment or whatever, but I have [the] ability to have access [the course] from the library, or ...home, ...[from]in Toronto. The sentiment that a hybrid course would have been positive was echoed in the surveys and the discussion groups conducted with the participants.

The participants also remarked on a gap between the instructions and their ability to complete assignments. At times, learners identified that there was insufficient material online to enable eLearning. Statements such as "...instructor was not giving enough instructions" or "not

all information that I wanted was there” exemplify the disconnect. Ahmed elaborated on this thinking by stating that the structure of assignments affected their collective outcome as learners: “[Give] short assignments that can be done in one or two hours of class instead [of] long ones so learners won't have too many problems”. Despite these setbacks, Ahmed felt he had gained knowledge about the online course management system: “I learned how to use Blackboard file management and most of the applications”. Harriet felt that she had gained important learning skills through the experience: “how to search for any questions that we may have on the Internet explorer, PowerPoint, microsoft word, excel, photoshop, and much more...”.

Shen acknowledged the type of commitment required to structure and deliver a hybrid course. He felt that this commitment may be too great for one instructor alone. He stated “I find there is too many things for one instructor (discussion group)”. As the instructor, Mary agreed; she stated, “There would be a lot of work involved to make it successful for them. So, it would be kind of creating a whole sub-course for them, and it just is not possible for me this year (post-course interview)”. Mary also reflected that her learners’ learning skills were a barrier to the implementation of the hybrid course. She expressed the challenge for ESL learners to communicate in written English. She described the types of interactions with ESL learners in the BTT2O course:

Yes, they could have emailed me. Even in a classroom, I find that the high, high ESL learners, they have trouble putting it into words even if I'm right there and there's a lot of pointing, 'Well, is it this?', 'no?', 'Is it this?' 'yes?'...[There is] a huge range of abilities in that class, huge, huge, huge (post-study interview).

It's Not All Bad

In spite of the resistance Mary demonstrated integrating the eLearning portions of the course, she recognized some positive aspects of eLearning. Mary identified positives features of the course such as the eLearning assessment tools, such as the quiz, the weekly course announcements, and the opportunity to navigate BlackBoard. For example, Mary reflected:

The main advantage for the learners was the exposure to BlackBoard. They were really happy to be exposed to something they will be using ... in college or university. At the beginning they were less comfortable and they became very comfortable in the end, to the point where they were just logging in on their own and just getting the work. Another advantage was the access to the course materials - they could login any time at home (post-study interview).

Moving Forward From Here

Mary was asked how she thought a subsequent course could be improved. She was able to identify what types of activities she would include, and where learners required extra support. She also felt the registration process should be more stringent: "I think it really does require a lot of planning, we kind of just did this without the registration clear to the learners". While the recruitment letter was available at the registration table, Mary felt that the educators who were working at the registration table did not provide the letter consistently to all course registrants. She also thought that a hybrid course should be advertised in a previous semester, rather than just at the registration table. In hindsight, Mary felt that a different level of course may have resulted in different outcomes in the implementation of the hybrid modality. She explained that "BTT2O is an introductory computer class. I'd like to try it with another class, another group of learners, a higher end group, like my grade 12 class. They would be comfortable with the language, they

would be more responsible learners (post-study interview)”. This contradicts the initial choice by the department head to deliver BTT2O as a hybrid course.

Lastly, Mary stated that one of the major disadvantages of eLearning for the learners was their access to computers. The majority of learners in the present study indicated that they had access to computers outside of school; all eight learners profiled within the study had home access to computers. Mary had been provided with a summary of the learner’s characteristics in late February.

Summary

While the focus of this inquiry (and the goal of the business department) was to implement a hybrid learning course and explore the learners’ experiences within it, the majority of the course was taught F2F. Despite removing any further eLearning sessions, learners were still able to complete the BTT2O curriculum expectations in order to obtain their credit.

The events and experiences surrounding this case study have been revealed. First, the identity of the participants and their contexts were explored. Then the settings, both online and F2F were described. The overlaying layer was the course in its revised form. Finally, we delved into the reflections of “what might have been”. This descriptive narrative helps to fill a gap in the literature where there is little available on either hybrid or online learning at the secondary level, nor is there a significant amount of research on the educational needs of the mature learner. These experiences will be further synthesized in Chapter 5.

Chapter 5: Findings

This chapter presents the findings for the hybrid learning research study. The pilot course was originally structured for three F2F and two eLearning sessions per week for the duration of the course (5 months); an initial two-week introductory period was scheduled entirely in the classroom. This period was designed to build learners' computer skills and confidence with the eLearning environment, as well as introduce the concept of a hybrid learning community. What unfolded was the delivery of a three-week introductory period, but in Week 4, the instructor made the decision to delay the implementation of eLearning sessions. Two eLearning sessions were conducted in Week 5 and Week 6, respectively. During Week 8, Mary decided to deliver the remainder of the course entirely in the classroom. Mary continued to question her choice to remove eLearning sessions from course, however, no further eLearning sessions were delivered. Mary did embed BlackBoard into F2F tasks for another 8 weeks, but the latter part of the course (4 weeks) contained no eLearning components.

The participants in the present study (learners and instructor) experienced a taste of hybrid learning from different vantage points. While the course was limited to two eLearning sessions, it did present the opportunity to explore both the nature of a hybrid learning, and a different course modality for mature learners. This chapter draws upon discussion groups, interviews, observations, surveys, and journaling data to collate and integrate all data sets. While each person's perspective is unique in its view of hybrid learning, the organization and presentation of the findings were guided by the DDLM categories: implementation, delivery, content, and outcomes, along with the research questions. The summary of the findings from the pre-course, temperature check, and post-course surveys are presented in Tables 4, 5, and 6.

Table 4.

Pre-course survey (n = 35; 16 female, 19 male) - Summary of Findings			
Research questions: <i>What are the experiences of mature learners participating in a hybrid course?</i> - How do contextual factors influence a hybrid learning experience? - How does the instructor influence a hybrid learning experience?			
Content	Delivery	Support	Outcomes
- Learners made few comments about the specific content of upcoming hybrid learning tasks. - Some learners felt that eLearning tasks would be useful when they transitioned to a college program. - Two learners identified that they would learn about the features of a course management system or computer skills.	- Many learners identified that the ability to work on their own time or at their own pace as beneficial for them. - Phrases such as those below exemplify this finding: - anytime of day - staying in contact - do my work anywhere - work around my job schedule - I do not have to come to school - Independent learning - Learners were concerned about a lack of computer skills with respect to using computer programs, or their computer crashing, as barriers to the eLearning sessions. (B) 88% of learners previously used the Internet more than once a week	- Some learners identified that a lack of accessible computers was a barrier when learning in the classroom. - Many learners expressed concern about decreased contact with their instructor as a barrier in the eLearning sessions. - Learners expressed a desire for F2F contact to answer their questions. - Some learners expressed concern about their lack of computer skills being a barrier to learning online. 61% of the learners identified themselves as intermediate computer users or better	Some learners anticipated that hybrid learning would enhance their eLearning and computer skills.

Table 5.

Temperature check (n=12; 4 female, 8 male) - Summary of Findings			
Research questions: <i>What are the experiences of mature learners participating in a hybrid course?</i> ○ How do contextual factors influence a hybrid learning experience? ○ How does the instructor influence a hybrid learning experience?			
Content	Delivery	Support	Outcomes
- Two out of eight learners indicated that they were acquiring a broader set of skills using two learning environments. - Three out of eight learners questioned whether they would be able to understand the content while working independently online.	- One learner recommended improving the access to the instructor for eLearning sessions using discussion forums and/or phone. - Many learners indicated the flexibility of the hybrid course, in terms of managing their time. - One learner indicated shortening or lengthening the time of study via eLearning. - Three learners indicated that they used eLearning to catch up on missed work after an absence.	Learners questioned whether direct access to an instructor was necessary, or whether access could be accomplished online.	- Learners were seeking more eLearning experiences, beyond the two sessions implemented; indicating that the hybrid course would improve if it could be used at home. - Many of the learners identified that they were not enjoying the experience because they were not participating in eLearning sessions.

Table 6.

Post-course survey (n = 10; 4 female, 6 male) - Summary of Findings			
Research questions: <i>What are the experiences of mature learners participating in a hybrid course?</i> ○ How do contextual factors influence a hybrid learning experience? ○ How does the instructor influence a hybrid learning experience?			
Content	Delivery	Support	Outcomes
Two learners commented on the acquisition of computer skills as a result of their eLearning experiences.	- Learners found the eLearning sessions and access to an eLearning environment provided them with flexibility to juggle their other commitments. - Learners appreciated the direct content with an instructor in the classroom in order to ask her questions. - Two learners indicated that they extended their learning time by accessing materials at home via BlackBoard.	There were no comments on support.	- Many of the learners comments included words such as: - Confident - Fun - Didn't feel like school work - Easy - Many learners expressed disappointment that eLearning sessions were not fully implemented. Learners indicated a desire to attempt further independent learning through eLearning.

The delivery and content of the two eLearning directly impacted the mature learners' experiences with hybrid learning (outcomes). The findings within delivery and content shed light on the issues of implementation, and give the reader an opportunity to decide for themselves their relevance to hybrid learning. A number of associated themes emerged under each category. Table 7 presents the findings from the post-study discussion groups clustered under categories and themes, while Tables 8 and 9 present the pre- and post-study instructor interview findings in a similar format.

Delivery

The mature learners and the instructor reflected on their limited experiences with the delivery of hybrid learning in discussion groups, post-study interviews, and pre- and post-course surveys. Four themes emerged in the delivery category: flexibility, accessibility, instructor presence, and interactivity.

Flexibility

In their surveys, learners reported that advantages of the eLearning sessions: the ability to complete tasks at their own pace and to connect wherever and whenever they wanted. A hybrid course was perceived as a flexible way to learn and seemed to fit with the learners' need to balance work, family, and school. While the hybrid course was not implemented in its entirety, learners' perceptions and experiences reflected that they viewed its flexibility in terms of time, pace, and location. This flexibility enabled learners to complete their course tasks. Learners agreed that the combination of eLearning and F2F sessions would provide them with the flexibility to juggle demands on their time. Many mature learners were already absent from F2F classes in favour of their extrinsic commitments (i.e., family or work); this pattern suggested a need to examine or shift from the traditional F2F timetable. Having the opportunity to log on at

Table 7.

Discussion group (n = 10; 4 female, 6 male) Summary of findings by category and themes	
Research questions: <i>What are the experiences of mature learners participating in a hybrid course?</i> ○ How do contextual factors influence a hybrid learning experience? ○ How does the instructor influence a hybrid learning experience?	
Delivery	
Flexibility	• eLearning sessions were perceived as flexible in terms of being accessed from anywhere or anytime. • many learners identified with the flexibility that eLearning and F2F learning would offer. This would allow them to juggle their commitments or jobs. • some learners indicated the flexibility of changing their course hours, either shorter or longer. ○ some felt they needed extra time to complete course tasks, and being able to do so at home was a benefit. ○ Others completed their work in less time, and felt that eLearning sessions would reduce the constraints of scheduled class times.
Accessibility	• learners agreed that the hybrid course increased their access to course materials. • BlackBoard maintained a record of learning materials where learners could access them when necessary. ○ this reduced paper management in binders for learners
Instructor contact	• learners were concerned about having direct contact with their instructor • some learners wanted answers to their questions immediately • some learners questioned how they would be able to contact the instructor online ○ some worried about being able to understand and ask questions online ○ two expressed concern about having to wait for an email because it interrupted the flow of their work • learners did not experience online contact with their instructor ○ some mused how a combination of email and phone contact could work during eLearning sessions
Interactivity	• learners agreed that eLearning within the hybrid course increased the interactivity within their course: ○ daily and weekly announcements on BlackBoard enabled communication ○ feedback via the online quiz • learners also pointed out the potential for email to increase communication with their instructor

Content	
Technology	- learners felt that eLearning was compatible with their needs - some pointed out that it was more engaging than learning F2F - learners felt that learning via BlackBoard reflected technological changes in society and college programs
Authenticity	- many learners placed hybrid learning within the context of their own lives: - college programs incorporate eLearning - training programs have eLearning components
Comprehensiveness	- Many learners expressed disappointment and frustration that the course was not more extensive to allow them to experience hybrid learning. - Learners appreciated two aspects of the hybrid course: - online quiz as an opportunity to build knowledge and skills - course announcements which provided a structure for their learning
Outcomes	
Engagement	- Few of the learners had previously experienced eLearning; none had experienced hybrid learning. - Learners felt that the eLearning components were: - fun - did not feel like school - Many expressed enthusiasm at the prospect of hybrid learning, even with their limited experience. - the combination of online and F2F learning seemed to motivate learners; in terms of its interactivity, flexibility, and accessibility - Learners continued to be concerned about how to access their instructor when they needed support, as well as how to learn successfully online.
Changing perceptions	- Learners seemed to identify with how to structure a hybrid course to meet their needs. - Many discussed the combination of F2F and eLearning sessions, in relation to balancing their own commitments. - Two learners also indicated the types of tasks they would like to see included in a subsequent hybrid course: online quizzes, tutorials, skills teaching.
Barriers to Implementation	
Learner proficiency	Many learners felt that they had acquired computer skills as a result of the experience.
Planning	Two learners identified that Mary had implemented eLearning components at the beginning of the course, but not toward the end of the course.
Attendance	- Many learners acknowledged that their attendance was inconsistent. - They stated reasons for missing class such as work, family obligations and "things to do". - Learners indicated that eLearning sessions would help them with their attendance because they could be present online without having to be physically in the school building.

Table 8.

Pre-study instructor interview Summary of findings by category and themes	
Research questions: <i>What are the experiences of mature learners participating in a hybrid course?</i> ○ How do contextual factors influence a hybrid learning experience? ○ How does the instructor influence a hybrid learning experience?	
Delivery	
Flexibility	• Mary identified that a hybrid course would be flexible for learners. ○ eLearning sessions would not require learners to come into the school building; which meant they could juggle their day around school and work commitments
Accessibility	• Mary identified that the eLearning environment would give learners another learning option, rather than just in class or with the instructor.
Instructor presence	• Mary was concerned that some learners required an instructor to be directly beside them while they were completing tasks.
Interactivity	• Mary expressed concern about the learner's ability to interact via email, in terms of putting their questions into words.
Content	
Technology	• Mary wanted to enable learners to become confident with BlackBoard through a series of tutorials and learning activities.
Authenticity	• Mary felt that the opportunity to build eLearning skills (independence, computers) would be an asset to them after their OSSD.
Comprehensiveness	• Mary hoped to create a range of learning resources to support learners.
Outcomes	
Engagement	• Mary felt that the combination of two learning environments would provide a "safety net" for learners and decrease their frustration.
Changing perceptions	• Mary was concerned foremost about creating a positive learning environment. ○ She indicated that if learners were struggling that she would deviate from the intended hybrid schedule as a solution, rather than revising the course.
Barriers to Implementation	
Learner proficiency	• Mary identified characteristics about mature learners as potential barriers: ○ time management ○ the ability to learn independently ○ the reliance on instructor presence ○ a range of language abilities ○ lack of computer skills • Mary felt that the eLearning sessions would help learners build their "trouble shooting" skills, especially those at the lower end.
Planning	• Mary was able to discuss the course structure in principle, and features she hoped to use within the hybrid course: ○ weekly course announcements ○ online quiz ○ discussion forum ○ PowerPoint presentations • No actual learning tasks were created prior to the onset of the course. • Mary struggled to differentiate between eLearning and F2F tasks.
Attendance	• Mary did not comment on the learners' attendance in the pre-study interview.

Table 9.

Post-study instructor interview Summary of findings by category and themes	
Research questions: <i>What are the experiences of mature learners participating in a hybrid course?</i> ○ How do contextual factors influence a hybrid learning experience? ○ How does the instructor influence a hybrid learning experience?	
Delivery	
Flexibility	• Mary did not comment on the flexibility of eLearning sessions learners in terms of meeting their needs.
Accessibility	• Mary felt that learners would not be able to access course materials because they did not have computer access. ○ she was concerned that computer labs were booked and not accessible to learners when they needed it.
Instructor contact	• Mary expressed concern that learners needed direct access to her each day.
Interactivity	• Mary acknowledged that course announcements and the online quiz was a positive experience for learners because of the type of feedback they received. • Mary expressed concern that learners would not be able to interact via email.
Content	
Technology	• Mary felt that technology was a barrier for learners ○ she was concerned that learners would struggle with using the features of BlackBoard
Authenticity	• Mary acknowledged that acquiring eLearning skills in connection with the hybrid course was important for mature learners. • Mary pointed out these skills: ○ independent learning ○ computer skills • Mary also connected the learners' feelings that they were contributing to improving the school's program as creating an authentic learning experience.
Comprehensiveness	• Mary felt that comprehensive eLearning content would be a learning barrier for mature learners. ○ Her concern centered on being able to directly support learners during a learning task. • Mary acknowledged that the online quiz was one comprehensive activity that was positive for the learners in her classroom. ○ Mary also pointed out the reference documents she'd uploaded as a good learning tool for mature learners.
Outcomes	
Engagement	• Mary identified the online quiz as an experience that engaged the learners. • Mary also pointed out that an ability to voice their opinions within a pilot course engaged the learners.
Changing perceptions	• Mary realized the progress that learners had made throughout the course. They were able to successfully: ○ logon and navigate BlackBoard ○ save and manage their files

Barriers to Implementation	
Learner proficiency	• Mary used the terms “low-skill learner” and “ESL learner” to identify groups of learners who were not sufficiently proficient to learn online. ○ These learners influenced Mary to adhere to a F2F course after only 2 eLearning sessions. • Mary described the deficiencies: ○ working with computers or programs (computer skills) ○ managing work load and time independently (self-directedness) ○ ability to communicate and understand instruction both verbally and in writing (language skills)
Planning	• Mary realized that both planning prior to the onset of a course, and ongoing adaptation once the course had begun were necessary in order to further implement a hybrid course.
Attendance	• Mary associated inconsistent attendance with implementing eLearning sessions. ○ She felt her implementation of eLearning skills were ineffective with rotating absences among learners.

any time and from any place meant the course delivery was flexible and could accommodate this aspect of learner’s needs. Fareed indicated that the option to log on remotely allowed him to balance his commitments. He stated “sometimes [BlackBoard helps], especially if people have a job or something, you cannot attend the class but you can do it [the work], you can get your credit (discussion group)”. Similarly, Ahmed pointed out his preference for eLearning sessions to allow him to complete his work and meet his own commitments. He stated “because I like to get things [done]... [an online day] is flexibility, instead of having to show up. Because there are a lot of things that I have to do in the morning, I miss a lot of classes (discussion group)”. Shen, Mustapha, Norm, and Maria all echoed this sentiment in the discussion group. The combination of eLearning and F2F sessions also provided learners with the potential to reschedule their course work when unforeseen circumstances occurred. As detailed by Harriet in the discussion group, this represented a source of flexibility:

I'd like [hybrid courses] on both [F2F and online]. I like to use the option - to come to class or be online. So like I say, if you are sick or something, you've got your kid down for a nap, or whatever, you're not going to be missing anything because you're online.

Similarly, learners viewed eLearning components as offering flexibility to complete their tasks at their own pace. Even though learners were required to be physically present according to the school's timetable, the eLearning components offered them the flexibility to complete their work more quickly or extended their options for task completion beyond class time. Mary would upload a task into BlackBoard, and upon their arrival to class, learners would log into BlackBoard, read the instructions and begin their work. This allowed learners to work at their own pace, without having to wait for the instructor's direction. This flexibility meant that learners were not entirely bound by their timetable. Learners could either shorten or lengthen their scheduled class hours. Norm exclaimed "...this is perfect. I can get the assignment done in half the class, email it, and be out of the class in 30 minutes (discussion group)". Whereas, Ahmed described a need for additional time to complete his work and BlackBoard offered him flexibility to do so. He explained:

It's something to see it on the screen and, not have your time taken away from you. It's like maybe you can complete the assignment. No, no I still need to do it, I'll do it at home. Oh, you can't take it home. Well now we have a computer with Internet capabilities. You can just finish it at home and email it in. That was a nice addition (discussion group).

eLearning sessions were perceived as offering learners the flexibility to log in from anywhere. Learners noted that eLearning sessions afforded them flexibility by negating the need to travel to the school building. This is especially beneficial when a learner is taking one course.

As Fareed describes, “ [a learner] may have only one class and that is [BTT2O]. It doesn't make sense to come 45 minutes on the bus and go back 45 minutes (discussion group)”. Learners’ frequent absences translated into missed lessons and assignments conducted during a F2F session. BlackBoard enabled learners who missed a F2F class to access the course content. The virtual classroom allowed them to “check work when I have missed a class and go online when I am not at school” (survey data). This provided an opportunity to catch up on missed work before the next class, rather than coming to class with a feeling that they were behind.

Accessibility

Both the learners and the instructor agreed that the hybrid course increased learner access to course materials. Learners were able to login to the BlackBoard course website to check weekly course announcements or download files for their assignments. Learners indicated that accessing course materials in this manner allowed them to both continue with course assignments despite an absence from class and to maintain organized course notes. Harriet described how she used BlackBoard to this end:

She also had what you were having that week, or so, maybe you've handed something in but didn't get to print it or something, you go 'what was that again?' You had the chance to go back and look 'oh, it was that week there'. I like the BlackBoard (discussion group).

Additionally, some learners indicated that their learning time was extended through their use of BlackBoard. In this way, the hybrid course was extending their access to learning materials. Ahmed explained that “I wanted to go back and figure something out. I used my computer to get my assignment (temperature check)”.

Learners repeatedly stated that they used BlackBoard to help manage their learning materials. The eLearning components of the course decreased the amount of paper to maintain

and increased their access to learning materials. “You don't have to search into your papers ... and you don't lose your binder. It's all still there [in BlackBoard]” (Norm, discussion group). In essence, BlackBoard acted as a safety net as learners worked through their course, and in this regard, access to course materials encouraged the acquisition of organizational skills. Harriet explained “that's the great thing; it's not like you lose a piece a paper, no, it's on the computer and you know it's there. When you can go back to it, you know it's not going to be erased (discussion group)”. What arose out of this access to course materials was a sense of security for learners. They were secure in the knowledge that they could access materials from the course whenever they needed it.

In contrast, the instructor was concerned that the eLearning sessions would decrease learner access to materials. Mary felt that learners did not have access to computers, and as a result, would not be able to access course materials. She explained her perception on how learners' access computers:

I think a lot of them did [access materials outside of class time]. But the reality with a lot of our learners is that many of them don't have computers. So they did access from friend's houses and things like that. But that was an issue also, that we couldn't let them, you know, force [eLearning] to be [part of the course]... they couldn't have to get it from home because many of them did not have computers (post-study interview).

Mary further commented that computer labs were often booked by other classes, and not always available for the learners in BTT2O outside of their scheduled class time. While Mary felt that learners did not have access to computers outside of class time, in their pre- and post-course surveys none of the learners reported difficulty in accessing a computer.

Instructor Presence

Prior to participating in the present study, some learners were enthusiastic that hybrid learning was a good fit for their learning needs. Others were concerned about the eLearning sessions, in terms of decreased instructor contact. They described that having an instructor physically in the classroom meant that they had immediate access to her when they needed questions answered. Some learners also expressed that they preferred F2F learning in order to persevere at a task. Some identified a need to interact with an instructor in person to respond to their questions. Cliff made comments such as “it's just gets to be a lot easier when you have an instructor so you don't get stuck (discussion group)”. Concurrently, Harriet recognized that certain learners required more instructor contact. She shared that “you only have to interrupt the instructor when you have a problem, so she can give her time to the learners who do have problems, more problems (discussion group)”. These learners seemed focused on not being able to complete a task without an instructor to provide answers for them. Norm stated “I want to be there, when I have a question, I don't want to have to go stop my work because I can't answer the question (pre-course survey)”.

Other learners expressed concern over their ability to ask for help online. Their concern was two-fold: having to wait for an email responses and their ability to ask questions electronically. For example, Maria worried that “asking questions through online is not effective since you can't understand very well what [question] you want to [ask] (pre-course survey)”. Similarly, Harriet, one of the older learners in the course, explained:

I like [the instructor] explaining it. I like the visual, they, [the instructor] walks you through it first. I like [the instructor] being right there to answer my questions. Not having to 'geez', well, I ask that question on Thursday. You also might have a thought

about something, but I like being in class to talk to the other learners there, and you go... you can blend that thought, like take something out of theirs and I really like the instructor-learner time (discussion group).

While learners discussed a need for direct instructor contact, it seemed that many overlooked that a hybrid course would alternate direct contact in F2F sessions with electronic contact during eLearning sessions. Norm also recognized that eLearning included other ways to access the instructor. During the discussion group, he exclaimed “I was shocked when they brought in email [into our course], I could just email my questions and assignments to [Mary]”. During a F2F session, learners can readily access an instructor, whereas an eLearning session requires that learners use email, discussion forums or telephones to connect with their instructor. Learners also acknowledged that the hybrid course was an alternative way to learn, rather than learning in the classroom with an instructor. For example, Peng indicated that “I get more experience with different teaching strategies (temperature check)”. While initially concerned about immediate contact, some learners started to picture how an instructor could offer support remotely. After the two eLearning sessions, learners’ statements indicated that they felt direct F2F access to an instructor was not mandatory. They described the possibilities of indirect contact with their instructor via email or phone calls. While Norm started off by saying he needed constant F2F instructor presence to complete his course work, he later explained “if there was one instructor on the cell phone or if she had a laptop and I get to call her up or send an email to get help (discussion group)”. Other learners suggested the option of having an instructor available at a scheduled time and location for those who required F2F instruction. Mustapha mused that an online instructor could be available throughout the day, rather than limited to one F2F session. He stated “maybe you have an instructor for 4 classes sitting in an office to be there

to help for those who want to come into class (discussion group)". Learners were not able to comment extensively on instructor access within hybrid learning as a result of their narrow experience with eLearning sessions.

Interactivity

All learners agreed that the hybrid course facilitated communication. They commented that BlackBoard established new mechanisms for course interactions: among learners on discussion boards, with the instructor via email or the assignment dropbox, or from BlackBoard itself through preset feedback. Daily and weekly announcements within BlackBoard also communicated course assignments and instructions for access to necessary learning materials. Learners indicated that these announcements increased the communication from their instructor, in terms of stating expectations for their learning process. Mustapha shared his feelings: "I like the weekly assignments, how you can check up on all your assignments to upload. I thought it was nice. They give perfect instructions, you can't go wrong (discussion group)". Norm highlighted this feature by stating "It's nice to see your assignments on screen, and it tells you the week that it's being held (discussion group)".

Learners completed an online quiz on the features and functions of computers. The quiz function within BlackBoard was set for multiple attempts. After completing an attempt, BlackBoard was set to provide learners with feedback on their responses. This type of communication was immediate once they had submitted their quiz, and allowed learners to refocus their learning in their next attempt. They used this feedback in order to improve their performance by going back to review their course notes. As Ahmed recounted, "you have to keep going back and forth on checking back with [BlackBoard] to make sure that you are getting all the answers right (discussion group)". For a few learners, the online interaction, rather than in

writing, was a preferable way to learn “...when I see the Blackboard and I see the quizzes online...I can actually think clearly. Not like when I'm looking at a piece of paper and I'm trying to decipher the handwriting or what not” (Norm, discussion group).

Learners also agreed that BlackBoard provided them with increased opportunity to communicate with their instructor. Maria reported that “I can email my instructor when I have a question (survey data)”. The learners surveyed indicated that this was more efficient for them than waiting for the instructor to be free in class. During the present study, only 5 emails were sent in communication with the instructor. Maria further explained how verbal communication was difficult in class with a large number of learners vying for the instructor’s time. “...she is always busy with other learners and I can email the question to answer when she has time (discussion group)”. Norm indicated that he used email to maximize his interactions with the instructor “if you have a problem, you can always email and ask...You have a bunch of questions and you just get to ask all of them (discussion group)”. This was in contrast to Mary’s feelings that learners would not be able to formulate questions within an email.

Content

The content that was delivered through eLearning in connection with F2F sessions was considered as the hybrid learning experience. Three themes emerged related to content: technology, authenticity and comprehensiveness.

Technology

Learners spoke positively about the technology (BlackBoard) used to offer the eLearning sessions. They contended that eLearning was compatible with the needs of today’s mature learner. In fact, eLearning was viewed as the new generation of learning. Norm provided the following comment on the topic during the discussion group:

I saw Star Trek Next Generation and they're all sitting in the classroom with their little computers. And that's cute. And there's an instructor walking around. And it was like kindergarten school. It keeps you on the flow. Computers are the next thing out. [Our hybrid course] keeps you constantly thinking about computers and technology.

Learners also mentioned that eLearning felt more engaging to them than F2F learning. Harriet, who was not entirely supportive of eLearning sessions, exclaimed “It was just fun, I like the BlackBoard (discussion group)”.

The instructor experienced technology from a different standpoint, in that Mary discovered shortcomings within BlackBoard and a need to check the functionality of equipment prior to delivering a session. Mary alluded to limitations within the discussion forum by stating “the discussion forum in BlackBoard is not ideal, I would use another virtual tool next time (post-study interview)”. Mary also expanded that there the school’s computers were not loaded properly with plugins or Java applets to open a discussion board screen. She explained that she should have checked the discussion forum functionality, as well as used the board’s technical support to remedy the situation prior to delivering her session. Mary expressed concern that some learners would not be able to download the applets or plugins at home.

Authenticity

The hybrid course was an experience that learners could place within the context of their future destinations. Many learners within BTT2O were anticipating attending post-secondary college programs. These learners indicated that BlackBoard was integrated into the college’s courses. This meant that college learners would be expected to use BlackBoard as part of their course work. Harriet stated “at [the college], the instructors all use it [BlackBoard] in their courses (discussion group)”. Mustapha confirmed her statements by stating “Yeah, I heard that

they were using it at [local college] too (discussion group)". Using BlackBoard within their hybrid course experience made the content authentic for learners because it was building knowledge and skills that they would need in the future.

Learners agreed that they would be expected to access course materials through BlackBoard as part of their course work once they entered the college system. The introductory course content that developed a familiarity with the features of BlackBoard meant that they would be better prepared to learn both F2F and online when they entered college. Shen described how the hybrid course would benefit him: "I'll be going to college, so I know that my friend told me that they practice that [BlackBoard] every day so ... I'm always going to try to get ready for the [college] (discussion group)". Looking ahead to a business program at the college, Ahmed described how BlackBoard will be used in his courses for both handing out course work and assessing learners. Ahmed explained that course assignments are uploaded into BlackBoard and learners access them independently from there. Ahmed commented:

At [the college], you will do the quiz on blackboard... [to access] the assignments, you just login, and you [find] the weekly assignment. There's all these instructions, you go to it, and sometimes there's an example of how it's going to look at the end (discussion group).

While many learners were planning to enter a college program, other learners pointed out how the hybrid experience was authentic for them in other areas. For example, Norm was planning on opening an Internet-based business after he completed his OSSD. He indicated that the course experience might help him build aspects of his business. He explained:

It's like the newest thing out... your whole instinct just goes for it. I think I'll do it on my own, just open up an Excel program and then do my budget on screen and see how it

looks. And maybe it will spark some interesting, some other route my business wants to go (discussion group).

Mary corroborated that implementing eLearning according to a continuum was beneficial for mature learners (Appendix E). She felt that the eLearning content of the hybrid courses enabled learners to acquire both computer and eLearning skills. While she acknowledged the college requirements made this experience authentic for learners, she also pointed out workplace destinations required computer and eLearning skills. Mary explained:

We definitely have a lot that would not be going to college. I was just actually reading a couple of articles about Home Depot and Mr. Lube that both have all of their training systems for staff on an e-Learning system, and I'm sure a lot of other companies as well. So, I really think that even if they are going to the workplace they may have to use a system like this (pre-study interview).

Mary acknowledged that mature learners felt validated by their participation in hybrid learning because it was a pilot course. Mary explained that learners felt as though they were giving input into changing the school's programs, while building valuable eLearning skills; this made the experience authentic for them.

In reflecting on the content of her two eLearning sessions within the hybrid pilot, Mary's view that the course experience was authentic of the BTT2O learners was consistent. In the post-study interview, she explained further:

...the main advantage for the learners was the exposure to using an eLearning course management system. They were really happy to be able to be exposed to something many of them will be using in college or university. I think at the beginning they were less

comfortable and ...they became very comfortable in the end, to the point where they were just logging in on their own and just getting the work.

Comprehensiveness

In the pre-course survey and during classroom observations, learners expressed trepidation and excitement about experiencing eLearning. They anticipated building computer skills, and learning how to learn online. When the actual course experience only offered learners a taste of eLearning, many expressed regret that they had not been given sufficient opportunity to experience a full hybrid course. Mustapha expressed his thoughts on the course experience:

We didn't really get to experience the hybrid course from home. Maybe if we had time off school to try it, I think it would be good even if we had one [online] day a week. I need a chance to experience it. If we had a time to try it, I think we might [have] liked it.

I wish more courses were like that actually (discussion group).

In the discussion group, Norm, Shen and Maria echoed these comments regarding the hybrid course content, indicating that they would have liked to see it happen. In this regard, the content of the hybrid course was not sufficiently comprehensive for the learners to experience hybrid learning.

The learners' desire for a more extensive hybrid experience was in contrast to the instructor's comments. While Mary did acknowledge that the hybrid learning experience was not as comprehensive as she had planned, her comments returned to the learners' eLearning capabilities. Mary felt that comprehensive eLearning content would be a barrier to the mature learners' success. She stated "So really, to do a solely eLearning system with them, it's not always successful. [Teaching the course] would be really hard to do that if I wasn't beside them (post-study interview)". She felt a comprehensive hybrid learning experience would have

prevented some learners from achieving academic success. Mary contradicted this sentiment by later stating that the course content could have been more comprehensive, in terms of offering eLearning experiences. She reflected “I could have taken it a lot further with them. We could have done a lot more eLearning days. We could have discussed the projects online (post-study interview)”. The phrase “solely online” highlights Mary’s discomfort with learners completing learning sessions entirely online without her presence.

While learners expressed regret over the extent to which the course content was available, many expressed appreciation for the comprehensive nature of certain tasks such as the online quiz. Post-course survey data revealed that the quiz content was straight forward, easy to understand, interesting and didn't feel like school work. Each trial of the quiz provided learners with feedback, pointing to areas they needed to improve. While learner-technology interactions have been previously discussed, learners pointed out that the comprehensiveness of the feedback within the quiz enabled them to learn independently. They indicated that the feedback motivated them to continue trying, rather than stopping after one attempt. There was a clear feeling of enthusiasm and willingness to engage in their learning. Ahmed indicated that he was able to build his knowledge and skills through multiple trials of the quiz: “there was [a chance] for fixing [my work], checking it again, and getting the right answer / wrong answer. We had to fix everything...But fixing it, you are learning (discussion group)”. Maria reported a similar experience:

The great thing about it was that if you get the answers wrong, you could still go back and retry it....it's really was something else to... learn from Blackboard [rather] than to do a quiz that you are only allowed to do once. But you are able to get the [chance] to search for the right answer and you can see it right on the screen (discussion group).

The instructor also acknowledged that the implementation of the online quiz was an area of the course where the content was comprehensive and the learners' experience was positive. Mary reflected on this part of the hybrid course:

I think the immediate feedback [supported them] and, [the learners] liked the way the questions were displayed. It was a great way for them to study because they were really testing their knowledge. And they just seemed to be [supported in their learning] (post-study interview).

Learners expressed appreciation for the organization of the assignments and valued how they were designed to build upon one another. They agreed that the delivery and content of instructions enabled them to learn. For example, Mustapha described one assignment which was posted on BlackBoard:

Yeah, it was step by step. I found that there was no point for a learner to ask a question the way she did it. I remember she asked everybody to do their name on Photoshop, and she did it step by step. And my god, the way she did, there was nobody should ask questions. It was very simple (discussion group).

Mary also uploaded a few reference materials into BlackBoard for learners to access during their course work. Many learners such as Ahmed, Mustapha, and Maria commented that they referred to these documents while completing their work.

Outcomes

While limited in nature, the two eLearning sessions and the exposure to BlackBoard provided participants with an opportunity to explore how hybrid learning connected to their learning. The experiences and examples described by the learners and the instructor from various

data sources suggest that emergent themes related to outcomes include: engagement, and changing perceptions.

Engagement

None of the learners had previously experienced a hybrid course. More notably, two of the profiled learners had experienced eLearning prior to the BTT2O course. Many expressed excitement to be part of a pilot course (instructor journal; researcher journal). When asked to reflect on the hybrid learning experience, Norm stated that “I learned school work is a lot more fun (post-course survey)”. During the classroom observation periods where learners were learning to access and use BlackBoard, a high level of interest was observed. Exclamations such as “this is so cool”, “this is fun”, and “check this out” were heard around the classroom (researcher journal).

The combination of F2F and eLearning sessions within the hybrid course seemed to be a motivating factor for learners. In particular, the opportunity to learn within BlackBoard seemed to spark a high degree of enthusiasm. For example, in the discussion group, Norm used an analogy to explain his feelings after using BlackBoard for the first time in the hybrid course. He stated “it's like touching a newborn baby, something overcomes you that you can't control. It's ... technology and it's just amazing once you get it showed to you”. Ahmed's comments seemed to reflect the perspective of most learners that the experience of eLearning sessions embedded within a course was positive. He expressed that “it is very interesting...BlackBoard is amazing how it works (discussion group). Ahmed went further to add that “it would be heaven” if the hybrid course had been implemented to its fullest potential.

The interactive nature of the quiz within BlackBoard seemed to spark the interest of learners. Harriet reflected on using the quiz feature of BlackBoard. As she discovered new

learning approaches, she was excited to share her discovery with Mary. Harriet expressed her reaction after observing her partner complete the quiz: “And I said, 'whoa, how did you do that [quiz]?". And we showed it to [Mary] and she hadn't seen that specific [question] yet either (discussion group)". The instructor also described a similar level of excitement among learners. She stated “[the learners] seemed to like it, it was different and new and kind of fun for them (post-study interview)".

In the temperature checks, post-course surveys, and discussion groups, many learners pointed to course attributes which met their needs, including flexibility, independent learning, accessing course materials from home, and the acquisition of computer skills (temperature check). Ahmed identified that a hybrid course met his needs. He stated that he was “excited to continue learning in this way (temperature check)". Fareed, Harriet and Maria stated the advantages of working at their own pace in a hybrid course (temperature check). Norm was excited with eLearning activities because it meant he could complete his work at his own pace (post-course survey)". Harriet mused about how far the flexibility of learning independently could be taken: “I would also love it if the eLearning component could maybe access some of the next course.... if you are really aceing a certain skill, you could proceed to the next level (discussion group)". Harriet also hypothesized that in cases where an instructor did not suit a given learner, the eLearning sessions would facilitate work completion. She explained that learners would complete work independent of the course instructor: “if you have a problem with the instructor, you can just do the exercises or problems on the computer, rather than [interacting] with the instructor (discussion group)".

Conversely, not all course tasks were engaging for learners. Challenges with following directions independently dampened the motivation of a few learners. Shen ran into difficulty

with uploading and downloading files while using the BlackBoard Assignment Drop Box feature. At the time, he tried to email his instructor in order to get more clarification on what he was supposed to do. He experienced frustration with asking questions online. He stated that “asking questions through online is not effective since you can’t understand very well what you want to do (temperature check)”. Meng made similar statements by stating “I get more confused online and if I can’t understand the work, there is no instructor around (temperature check)”.

Local college programs make use of BlackBoard as part of their course features. Mary acknowledged that learners would be able to transfer the skills they acquired within the hybrid course to new courses, and that this was a motivator for them. She stated her perception of the learners’ experience: “they were really happy to be able to be exposed to something they will be using many of them in college or university (post-study interview)”. Mary was also aware of the learners’ perception that they were trying something new, and this was engaging to them. She stated that “I think that they [the learners] felt happy and valued to be one of the few groups of learners who were learning in a new way (post-study interview)”.

Changing Perceptions

Neither the instructor nor the learners had previous experience with a hybrid course. While the extent of hybrid learning was limited to two eLearning sessions, participants were able to build their understanding of what it meant to teach or learn within a hybrid course. In this regard, their perceptions of the prerequisites for the course shifted. Changing perceptions was organized into two sub-themes: mature learners and instructor.

Mature learners’ perceptions. Through their course experience, the learners seemed to gain a clearer understanding of how learning occurs in a hybrid course. At the onset of the study, learners seemed to lack a clear sense of hybrid courses. The learners posed questions such as “do

I have to be a smart to take a hybrid course?” and “do I have to be good with computers to take part?” during the initial classroom observation. I engaged in a subsequent discussion with learners and many of their comments seemed to indicate the learners’ lack of experience, and more aptly, their lack of knowledge about learning in hybrid courses. The learners’ initial concerns about the need for instructor access within a course are also reflective that they had not considered how the combination of F2F and eLearning sessions may balance this need.

After their limited hybrid learning experience, learners reflected more precisely on the structure of a hybrid course which would best meet their needs. This demonstrated a shift in their perception of hybrid learning. Some learners described how to schedule a hybrid course each week. For example, Ahmed suggested “three days at home, or wherever. [This] should be an option, three days...If you do 3 days online, there are 2 days weekend, and then you go 2 days only. That I think is not enough to be with the instructor (discussion group)”. Ahmed’s comments describe what would work best for both himself and his classmates. Initially he is suggesting 3 online days a week, but then realizes that this would reduce the F2F contact with an instructor, which would not be enough. This reflects how the experience enabled Ahmed to examine his perceived need for instructor access. Similarly, Harriet, Mustapha, and Maria made comments regarding the ideal number of F2F classes in a week; they all agreed that two eLearning sessions per week was suitable for their lives and their education goals.

Similarly, the hybrid learning experience enabled learners to examine the types of learning tasks suitable for a hybrid course and for their needs. Learners differentiated between tasks appropriate for F2F sessions, and those more suited for eLearning sessions. They expressed that eLearning sessions could be used for certain tasks such as assessments and research, whereas the classroom was more suitable for tasks such as introducing new concepts and group

work. For example, Peng stated that “I think the online stuff would be good for testing knowledge and [ideas] (discussion group)”. In the discussion group, Norm made recommendations regarding how to effectively implement a hybrid course. He explained “I would start by teaching the kids about computer and go about teaching them how to get on the Internet, and then teach them different programs (discussion group)”. In this regard, the learners were able to reflect on their own learning needs, and connect them with the structure and tasks of a hybrid course.

The instructor's perception. As an instructor, Mary wanted to create a positive learning environment; her goal was to draw learners into the course, rather than push them away. In this regard, she wanted to avoid any negativity where learners would feel frustrated during their learning process. For example, Mary described her activities in relation to learner success: “can they do this the first time. So I'm making the actual assignment of the day quite simple, quite low-end. At least for the first day, I don't want to scare them too much (pre-study interview)”. Mary had an expectation that eLearning would fall short of meeting the needs of mature learners. Comments such as “I do see some learners where I think, oh boy, are they going to be able to do this? (pre-study interview)” exemplify Mary's early concerns. These comments exemplify Mary's reticence to allow learners to struggle over a given period of time, even a short one. She was concerned that these learners would be turned off if they were met with frustrations. She planned to use learner engagement in course tasks as the indicator for implementing eLearning sessions. In her pre-study interview, Mary stated “if we try it after a few weeks and they are really not, they don't feel good, we're not going to push them”.

Once the course had begun, Mary's comments continued to reflect her concern that learners were not able to cope during the eLearning sessions. Mary expressed a concern that the

mature learners would lack self-directedness, computer and language skills which would prevent them from succeeding online. While these skills will be discussed in the subsequent implementation category, they reveal Mary's early perception that eLearning was not suitable for some mature learners. In a series of phone conversations, Mary listed several reasons for why her learners were doomed to fail: they are not mature learners (07/02/2006), they are going to get frustrated (20/02/2006), they can't even upload files properly (27/02/2006), I'm not going to be able to do this (phone conversation, 03/03/2006). It was this perception that influenced Mary to make decisions on behalf of learners and deviate from the continuation of eLearning sessions.

These statements were in contrast to those made in Mary's journal. The word "some" appeared often in Mary's journal when defining the portion of learners not successful in a task, and the phrase "mostly successful" often appeared at the end of her entries. Some of her journal entries are listed here:

- some trouble with passwords, mostly successful (instructor journal, 20/02/2006)
- some trouble by weaker learners in navigating in blackboard, mostly successful but time consuming (instructor journal, 24/02/2006)
- There were a few learners – in most cases with very low English – that didn't seem to understand the assignment feature at all (instructor journal, 06/03/2006)

These statements exemplify that Mary based her decision to adhere to F2F sessions were based on a small set of learners in her classroom. This subset of learners will be discussed in the implementation category. While Mary's original perception was one of defeat, there was a shift in her perception as the course progressed. Her early statements seemed to predict that learners would struggle with eLearning sessions, whereas her latter comments were more positive and hopeful regarding their ability to succeed.

Reflective practitioners use a teaching experience to inform, adapt, and revise course structure, content, and delivery. They may reflect on what teaching strategies were effective, or what tools were best suited for their learners. Mary demonstrated that she engaged in reflective practice through use of her journal and through her conversations with colleagues and me. This reflective practice contributed to a change in Mary's perception that a hybrid course could be positive for mature learners. She noted an improvement in the computer skills of learners through their course experience. For example, after 8 weeks of integrating BlackBoard in F2F sessions, and delivering two eLearning sessions, she recorded in her journal: "even the learners with lower technical abilities (approx one-third of my BTT20 group) who don't really use [BlackBoard] unless they have to, even they can now at least get to the weekly assignment area etc...(28/03/2006)". During her post-study interview, Mary acknowledged the progression of learners' eLearning skills:

I think at the beginning they were less comfortable and ... they became very comfortable in the end, to the point where they were just logging in on their own and just getting the work. They were even logging in at home. Yes, very much a comfort level using computers in general to be able to do that (post-study interview).

These comments exemplify a shift in Mary's perception that mature learners would be able to succeed during eLearning sessions. Unfortunately, her reflections did not translate into renewed attempts to implement eLearning sessions. In the end, Mary realized that she had implemented some components of a hybrid course, without providing learners with a full opportunity to experience hybrid learning. Mary reflected on her decisions to adhere to F2F sessions, rather than combine F2F learning with eLearning. In her perception, she felt that exposing learners to

the concept of a hybrid course was a suitable outcome, rather than exposing them to a hybrid course. She explained

I really feel that just exposing these learners to BlackBoard is a great thing. This is now [a] pre-hybrid course, rather than a true hybrid course. But it is what I am comfortable with, and what I think my learners are comfortable with. Personally, I think it is a success in itself to expose the learners to it, and the higher end learners will continue to check blackboard and complete assignments at home (instructor journal, 20/04/2006).

Perceived Barriers to Implementation

The content and delivery of the limited hybrid experience, and its outcomes inform how issues connected with implementation are influential in a course experience. Under implementation, three themes emerged: learner proficiency, attendance, and planning. Data relating to the implementation category became apparent in the interviews with the instructor, along with the classroom observations, the instructor journal, the temperature check, and the learner discussion groups.

Learner Proficiency

A learner's proficiency is his or her ability to understand and complete the learning task. The discussion of proficiency will make reference to the terms "low-skill learners" and "ESL learners". Mary often referred to these subsets of learners as those who possessed limited skills relative to other learners. The "low-skill learners" were identified as those who lacked study and computer skills, whereas the "ESL learners" struggled with their English-language skills. While there was no formal mechanism identifying these learners, Mary often referred to low-skill and ESL learners as those struggling in the learning process. For example, during an introductory eLearning activity, Mary commented that "it is extremely difficult for low skilled and ESL

learners (instructor journal)". Mary estimated that both subsets of learners comprised one-third of the BTT2O learners.

All the mature learners were expected to learn within two learning environments: F2F and online. These two environments required two sets of diverse learning skills; eLearning would require skills new to most learners. Sub-themes under the learners' proficiency influencing the implementation of eLearning sessions emerged in three areas: computer skills, self-directedness, and language skills.

Computer skills. BlackBoard was the virtual classroom for the eLearning sessions. In order to participate online, learners needed to be able to access and navigate BlackBoard. Accessing and navigating BlackBoard necessitated computer skills such as using a login and password, downloading files, file management, and locating materials on the Internet. The absence of computer efficacy among low-skill learners influenced Mary to eliminate eLearning sessions within the hybrid course. In working with learners F2F, she observed that low-skill learners struggled with their computer skills. She was apprehensive that a lack of technical skills would prevent success in learning online. As a reminder, many mature learners did not have previous eLearning experience (85%). However, most had home computers (88%) and 70% identified themselves as comfortable and capable using computer programs and the Internet with 88% accessing the Internet more than once a week.

During an introductory F2F eLearning task, Mary directed learners to access BlackBoard. While she observed that the majority of learners were successful in completing the task, she noted that a few learners struggled with their first login attempts. She stated that "we had some trouble with passwords, but we were mostly successful (instructor journal)". Mary equated the ability to login to BlackBoard to entering a classroom through a door. The challenges

of a few learners in her class influenced her to question whether eLearning sessions were appropriate for her course. Learners who could not access BlackBoard would not be able to complete their course work. In conversation, Mary explained to me “If a learner cannot walk through the door, they cannot enter the learning environment (researcher journal)”.

Some eLearning tasks required learners to download a file from BlackBoard and follow written instructions to complete the assigned task. Mary noted that low-skill learners’ file management skills were a barrier to task completion. Some learners were unable to access the correct file or to save it as directed. Mary further elucidated that other learners were not able to save the file properly into their own documents storage space. Mary clarified that they were saving extraneous files, rather than the designated file. This meant that learners were not properly accessing eLearning materials. Mary explained:

About 1/3 of the learners had trouble initially with using “save target as” and saving this template to server space. Many tried to do a File > save as from Internet Explorer and ended up saving huge “Blackboard Academic Suite” files in their folders. There was also the problem when they would open the forms document, try to fill it out and [were] not able to save it. I saw many examples of this when I checked their folders for completed work (instructor journal).

Mary equated these challenges with file management with a need to avoid implementing eLearning sessions in her course prior to the first eLearning session.

The Assignment Tool in BlackBoard was used by learners to upload and submit assignments and by the instructor to access submissions. Mary planned to use the Assignment Tool so that she could conveniently download all submissions from one location. She explained that in “the Instructor’s account in Control Panel > Gradebook > I can access their files this way

and download a zip file of all learners assignments (instructor journal)”. Mary noted that some learners’ files were not properly submitted. She explained “I realized that the [low-skill] learners had attached their files, but must not have pressed submit, because I did not see their files as being submitted in the [DropBox] (instructor journal)”. Mary was concerned that the eLearning sessions were not suitable for some of BTT2O learners because they could not submit their work properly. Mary felt that if learners were not able to submit files properly that they would become frustrated with completing their tasks during an eLearning session. She explained that “for these [low-skill learners] they may get stuck on the computer and they may get frustrated, but there is a safety net in the classroom (pre-study interview)”.

Despite a few difficulties with low-skills learners submitting work according to her instructions, Mary acknowledged that many other learners within her class capably completed tasks as directed. She stated that “many had no trouble at all, but for the low-skilled learners, it was a lot of trouble (instructor journal)”. Mary’s decisions to discontinue eLearning sessions seemed to overlook the successes of the majority of learners and hinged on her perception that the computer skills of the low-skilled learners were a learning barrier. She reflected:

...the problem is that the low-skilled [learner] still has trouble, [he/she] often ends up just emailing it [their assignment as an attachment] to me or leaving it in their folder (I then have to hunt around for things). I highly doubt that this low-end group of learners has the file management skills to do this [online] without an instructor in the room (instructor journal).

Early in the course, the low-skill learners’ proficiency to complete functional tasks on the computer overshadowed the implementation of eLearning for all learners. Even before one eLearning session was delivered, Mary decided to delay or revise eLearning opportunities. She

reflected that “I am feeling right now that because of the skill level of my learners, I won’t be doing as many online days as originally planned (instructor journal)”. She later expressed that she was concerned about creating a positive environment for learners and that eLearning sessions might decrease their engagement with the course (phone conversation with researcher). Mary’s comments exemplify how her interpretation of low-skill learners’ computer proficiency detracted from the implementation of eLearning sessions on a regular basis.

Self-directedness. Self-direction in the learning process emerged as an issue influencing the implementation of eLearning sessions. Self-direction is the ability to complete a task independently. For eLearning sessions, mature learners were required to put different skills to use than in F2F sessions. The eLearning sessions inherently required the learner to select when, where, and how long they would work, rather than being directed by their instructor and the course timetable. To be successful, learners needed to be able to manage their time, work independently, and persevere at a task. In the classroom, Mary would redirect learners to focus on their work or give guidance when a task became challenging for them; she realized she would not be able to directly do so during eLearning sessions. Concurrently, Mary indicated that many mature learners had previous challenges in education, and needed more reassurance in their learning process. She explained that “there is a very big range in the learners’ abilities, their confidence [academically] and their language level. All of these factors contribute to the need for [an instructor] there to answer their questions (pre-study interview)”.

Mary attached perseverance within the set of self-directed skills. Once the course began, Mary questioned whether eLearning sessions would prevent or enable mature learners to build self-directed skills. Mary acknowledged that rather than locate information independently, learners often relied on the instructor for immediate answers. However, she recognized that

eLearning sessions would provide an experience where learners could start building perseverance in their skills set. She explained:

I think that this [online] environment will also help them develop their trouble-shooting skills. So going back to, you know, the handout, or the PowerPoint presentation, or the help section of the software to help them answer their own questions rather than relying on me. This again will be something they will have to do as they progress through their education (pre-study interview).

Mary seemed to waver between concern over the mature learners' apparent lack of self-directedness, and the need to provide them with an opportunity to succeed or struggle within a learning experience such as eLearning.

Mary also associated self-directedness with time management. She generalized that the mature learners in her class lacked the ability to effectively manage their time. Mary identified the potential for eLearning sessions to foster the development of time management skills. She predicted that while learners may struggle initially to schedule their eLearning time, they would improve as the course progressed. Mary explained that these learners needed an opportunity to both struggle and try different approaches, as well as to learn in a controlled manner. When anticipating the benefits of eLearning for mature learners, Mary stated:

Hopefully they will [learn], even if they make a few mistakes and don't manage their time well, they'll see how it impacts on them. So it's...exposure to having to deal with things like that. Hopefully, we might teach them some time management skills in the long run (pre-study interview).

Mary also perceived that the low-skill learners would benefit more from improving their self-directedness through eLearning than the more capable learners. Again, she seemed aware

that in order for mature learners to build skills such as time management, independence, and perseverance, the learning process would involve successes and setbacks. Initially, she seemed prepared to give all learners the opportunity to build these skills through eLearning within the pilot hybrid course. In Mary's words:

...it'll give...the ones that are lower end, I think they especially, they need practice. It might be difficult for them at first. I think we are kind of doing them a favour to expose them to it. If they don't get any experience, they are going to have a really hard time having to do this later on (pre-study interview).

This awareness of the learning process and how it facilitated the development of self-directedness for mature learners did not translate into adherence to eLearning sessions once the course began. Mary's perception that the low-skill learners were struggling, rather than succeeding, discouraged her from implementing eLearning sessions. She perceived a lack of self-directedness in the low-skill learners and cancelled eLearning sessions for all learners based on the skills of these learners. She stated "I don't have a problem with having the higher-skilled learners continue with online days (post-study interview)".

Language skills. Data revealed that the implementation of eLearning sessions was also influenced by the language skills of some learners. Mary identified that learners need to be able to comprehend and respond to written text, and to communicate questions in writing to the instructor when online. In her journal, she often described the wide-range of language skills among learners. For example, after an eLearning task involving the discussion forum, she wrote “I’m sure that the variance in answers and language gave you an idea of the broad range of English levels the learners have (instructor journal)”. Based on her early concerns of learners’ language levels, Mary began to question if ESL learners would be successful learning online.

Mary expressed concern that learners would not be able to understand written instructions or pose questions electronically. She predicted that ESL learners would require an instructor to be physically beside them, and that eLearning sessions would not be suitable for these learners. She explained that “in terms of questions over email, or questions in a discussion board, it may be difficult for a lot of these learners to put their problem into words, especially with a language barrier (pre-study interview)”. After having implemented only one eLearning session, Mary contacted me via phone during the Week 5 of the course. She expressed her frustration and concern over the ESL learners’ ability to follow directions online, and questioned whether further eLearning sessions would be possible. She stated, “[ESL learners] are not mature learners, they are not going to be able to do this, some of them can’t even follow my directions to upload a file properly; they just can’t do this”. She implemented one subsequent eLearning session (online quiz), but there were no attempts to communicate with learners via email or the discussion forum. Mary struggled to move beyond the initial challenges of the ESL learners.

Mary’s perception that the eLearning sessions were not suitable for ESL learners was also based on their English language skills. She reflected

Yes, they could have emailed me. I think it would have been hard for them to put their question into words that I could [understand] even in a classroom, I find that the high, high ESL learners, they have trouble putting it into words even if I'm right there and there's a lot of pointing 'well, is it this? no? Is it this? yes? (post-study interview)

Mary felt that ESL learners would not be able to express themselves effectively online. Mary was concerned that these learners would struggle during eLearning sessions because they lacked the language skills to persevere. She partially based her decisions to delay and cancel eLearning sessions on the skills of the ESL learners. This perception was expressed during the post-study interview when Mary reflected on the course experience:

I couldn't do that with about one-third of the class because they are much more needy, and [have] a huge range of abilities in that class, huge, huge, huge. All of those things contributed to not being able to take the project as far as we wanted.

One learner, Fareed contradicted Mary's belief that ESL learners required an instructor to be present when working online. Fareer was classified as an ESL learner by Mary. In describing eLearning materials and instructions to complete a course task, Fareed explained that he required no further input from his instructor. His description of the eLearning session was as follows:

"[the work] was written. It was writing everything. For me, she didn't have to explain because it was there. What you do next, step-by-step. I didn't have to ask a question (discussion group)".

Attendance

The inconsistent attendance of BTT2O learners emerged as another factor contributing to the reduction and removal of eLearning during implementation of the hybrid pilot. Mary wanted to build the eLearning skills of her learners but their inconsistent attendance presented a challenge. She was concerned that if a learner missed a F2F lesson, he or she may lack the

background knowledge or skills required to complete the connected eLearning activity. Many of the learners who did not obtain their credit had inconsistent class attendance patterns. In a discussion with Mary, inconsistent attendance was common in her classes. She expressed frustration with meeting the learners' needs when their attendance was inconsistent. As an instructor, this meant she was often teaching and re-teaching topics when learners returned to class (researcher journal). The learners' inconsistent attendance patterns in Mary's classroom created a sense that her introduction of eLearning skills was ineffective, which in turn contributed to her decision to avoid further eLearning sessions. By avoiding implementing eLearning sessions, Mary had one less skill that she needed to reteach. This decision was not supported by the department head.

I observed a similar pattern of inconsistent attendance throughout the study, both in observing learners and in collecting data. Different learners would be absent on the scheduled days when surveys were conducted. For example, on the day when Mary introduced BlackBoard, there were more than 10 learners absent from class (researcher journal). Learners who were absent during survey days did not respond to attempts to complete missed surveys. This attendance pattern resulted in only 10 learners out of an original 47 participants in attendance during all the classes when surveys were conducted. This made collecting data about the hybrid course challenging. Attendance was a constant frustration for Mary during course delivery.

While many learners acknowledged that they missed a high number of classes, they argued that hybrid learning would prevent challenges with their attendance. Often the learners would explain that they had commitments outside of school that necessitated an absence from class. This resulted in ever-changing attendance patterns in BTT2O. For example, Norm defined his attendance as "attends class 9 out of 10 times (demographic survey)". Shen indicated that he

needed to work on “trying to be on time for class (demographic survey)”. Peng stated that he had “family commitments so I miss class (demographic survey)”. Learners identified that a hybrid course would improve course attendance both by providing an alternative way to be considered “present” in class. Learners expressed that BlackBoard could monitor their attendance. Fareed identified that while he was often unable to attend a F2F class, an eLearning session provided him the option to continue his course work online. He explained “you cannot attend the class but you can [login to BlackBoard]. So that's considered as your attendance. You [worked online for an hour] and they [instructors] can see that (discussion group)”. Mustapha agreed with Fareed “you visited this BlackBoard on that day, so we take that as attendance (discussion group)”. Norm described that taking attendance online extended the learning opportunities for learners. He explained “Yes, or the attendance may be done online for the people who don't show up, you have to login at this time or that time [to still do their work] (discussion group)”.

Planning

Planning was a factor that impacted the implementation of eLearning sessions. Both F2F and eLearning sessions required preparation, in terms of selecting teaching strategies and designing materials. In order to learn online, learners needed to feel confident using the features of BlackBoard. This would help them internalize how to learn online. As a starting point, Mary planned tasks to familiarize learners with BlackBoard (Appendix E). Mary’s pre-course planning focused on skill-building for mature learners. At the same time, she established a structure to provide support for learners and guide her planning. She also created a learning routine where the learners would begin a session by logging in to check their daily and weekly tasks, and subsequently completing their work as directed. This routine would be followed whether during

an eLearning or F2F session. She felt that this would be a thread to connect the two learning environments. Mary explained:

I'm organizing it by week, which really helps me organize myself, and ... whether or not, we are in class or online, I am going to put a weekly overview of the steps that we are doing all week [in BlackBoard], so that I'm using it as a place to go to find the assignments on an online day or a regular day (pre-study interview).

Moving beyond an online comfort level, Mary planned for learners to conduct course tasks through the access of electronic materials uploaded BlackBoard, or by using hyperlinks to direct learners to other websites. Mary alluded to creating electronic resources such as samples of work, reference guides, and classrooms handouts. These would be made available through BlackBoard, where learners could refer to them as necessary. She felt that this would provide eLearning supports:

...because we are doing this in a hybrid way, I'm hoping to really prepare...resources like, 'the PowerPoint presentation that I showed you yesterday will be up on Blackboard. You can go back to it and try to see the steps, or see the handout'. We'll just give them as many resources as possible to troubleshoot their problems and try to reassure them that just do the best you can and we're going to see how it goes and give me feedback (pre-study interview).

Mary also planned to use the BlackBoard quiz function to have learners check their understanding on given topics. She described her plans to implement this tool:

...for example, next week I have some ... links to some online tutorials where [learners] are going to go through, and then they are going to complete an online quiz afterwards, so getting a little more into understanding [the power of eLearning] (pre-study interview).

Mary's pre-course planning included the eLearning skills continuum, introductory activities, and one online quiz. While she had a plan for structure and potential activities, she had not created any further tangible materials. Based on her planning, Mary implemented the introductory tasks, two eLearning sessions (discussion forum and online quiz), as well as weekly announcements for the first 12 weeks of class. She also directed learners to a website that offered a PowerPoint tutorial. Her intended plan did not translate into the creation of additional eLearning or hybrid tasks once the course began. Mary was troubled that she did not implement more than two eLearning sessions. She realized that more planning was required prior to the onset of the course, in order for it to be more successful. In the post-study interview, Mary stated that a hybrid course needed to be "really well structured at the beginning. I think it really does require a lot of planning". She further reflected:

It's almost like teaching a course for the first time, just in general. I wanted to [do more]. I don't know [what happened]. We had talked about types of possibilities [for online and F2F learning]...It's stuff you do it all in class, but is transferring those lessons, they don't always transfer online. You can't just... rewrite lessons and [have them] make sense when I'm not [beside the learner]... It is more work as well. I guess it would be finding a balance in how to do that best (post-study interview).

Mary pointed towards areas where her planning required more attention. She identified the need to create eLearning materials, as well as integrate other eLearning components such as discussions, video, and audio within her course structure. She indicated that this type of planning would facilitate the implementation of a hybrid course, as well as allow her to better support learners. For example, Mary discussed her proposed areas where the course could improve:

.... if I were to do it again with BTT2O and was able to set it up, [I would] put in audio clips, maybe even video clips, perhaps somehow giving extra support to that group [of low-skilled learners], like maybe times where they come in, and the other comfortable learners don't. I might add PowerPoint presentation lessons...that [learners] could just play and that would be my lesson on that topic. That would be great and [the learners] could run through an actual lesson... I'd like to also add more discussion board stuff (post-study interview).

Learners were not consulted regarding changes in course delivery from a hybrid to a F2F course, but they became aware of the predominance of F2F strategies. A needs analysis is a first step described in the DDLM (MacDonald et al., 2001). Fareed commented about the use of the class announcements in their course structure: “after a while, [course announcements] were not updated. I think we stopped the Blackboard after a while (discussion group)”. At the same time, Fareed hypothesized on Mary’s choice to decrease the eLearning sessions by stating “I find there are too many things for one instructor. Maybe at the beginning of the semester, she had energy maybe. At the end of the semester she got tired (discussion group)”.

Summary

With only two eLearning sessions delivered, the BTT2O course circumvented the fringes of hybrid learning. The mature learners’ and the instructor’s collective journey emerged under four categories: content, delivery, outcomes, and implementation. The extent of data was minimal under the content category; this reflects the limited experiences of participants engaging in hybrid learning and teaching. Authenticity, comprehensiveness, and technology were revealed as three themes under content, while the themes of flexibility, accessibility, interactivity, and instructor access were clustered within the delivery category.

The categories of content and delivery informed the outcomes of this inquiry: engaging learners and changing perceptions. The study also revealed how a hybrid learning experience developed the instructor's and learners' perceptions about hybrid learning. The experience enabled the instructor to redefine the time and commitment required to re-tool course materials for hybrid learning and how to accommodate the diversity of learners' abilities within it. Concurrently, learners were able to envision hybrid learning in connection with their own learning needs.

Collectively, the content, delivery, and outcomes of the study mirrored a feedback loop; they informed the implementation category. The themes of learner proficiency, attendance, and planning emerged as barriers to implementing hybrid learning within this case study. The themes and categories discovered in this study will be further situated within the research in Chapter 6.

Chapter 6: Discussion

The purpose of the present study was to develop an understanding of the experiences of the mature learners and the instructor in a hybrid course. Yin (2003) acknowledges the multiple realities in a qualitative case study, discerning the perspectives of the researcher and the participants as distinct within a case. Both Yin and Wolcott (1990) recommend an exploration of these respective experiences to search for important meanings, patterns and themes. Wolcott further suggests that discussing these relationships within a case study presents “the potential for understanding something beyond it” (p. 33).

A hybrid course is known as a mixed mode of instruction, formally combining traditional F2F instruction and eLearning to facilitate the learning process. The weekly schedule of the intended hybrid course was to combine two eLearning and three F2F sessions each week. The actual course only included two total eLearning sessions; all remaining sessions were delivered F2F. Despite the elimination of eLearning sessions, BlackBoard was integrated periodically in F2F teaching through course announcements and assignment downloads.

The participants in this inquiry were key stakeholders in the hybrid course: the learners and the adult educator (instructor). From their numerous perspectives, an in-depth multi-facted picture of teaching and learning within a hybrid course emerges. Based on the theoretical framework of this study, I postulated that the mature learner’s motivation to learn, reflected by learner satisfaction, engagement, and perseverance, would be influenced by the design and delivery of a hybrid course tailored to meet their needs. In light of the discrepancy between the planned and the delivered hybrid course, the learners’ experiences were examined at two levels: first the design, development and delivery of a hybrid course according to the constructs of the conceptual framework, and second the perceived learner outcomes when engaging in a hybrid

learning community. Following both Yin (2003) and Wolcott's (1990) suggestions to present detail and context in the analytic writing, this chapter draws from the discussion groups, observations, surveys, and journaling data in order to collate and integrate all data sets. This chapter synthesizes the themes emerging from the data analysis within the context of the literature: adult learning, the tenets of online and hybrid learning, and issues of professional cultures. A return to the two specific research questions that guided the study provides the framework for this exploration and ultimately sets the stage to answer the overarching research question: What are the experiences of mature learners participating in a hybrid course?

Question One

How do contextual factors influence a hybrid learning experience?

The themes explored in Chapter 5 help reveal contextual factors which contributed to the hybrid learning experience. Despite a system and a school direction towards innovative technology-based course delivery, the hybrid learning experience was shaped by many factors, not all pedagogically driven to facilitate its success. The administration at the school and the learners within the course led Mary to make trade-offs during her course delivery.

Institution Before Innovation

The institution is at the core of a strategic paradigm shift in course delivery. In making the shift, the organization can make investments into technology, professional development, and ongoing supports. Somehow the school administration stopped short of enabling the transformation of the course into hybrid learning. The school board purchased a board-wide license for BlackBoard and created accounts for any instructors who requested it, the principal stated that the direction of the school should involve innovative steps to pilot new course delivery approaches to improve their school programs, the department head listed a hybrid

course in course offerings, and the instructor committed to delivering the course in a hybrid modality. Even though this vision reflects current technological directions at the school board level, they were only partially successful in creating conditions necessary to effect a positive change. Three contextual factors detracted from the implementation of the hybrid course: quality professional development, time and money, and learner selection.

Effective professional development wanted! The shift from traditional F2F to hybrid learning necessitated the inclusion of new, and perhaps unfamiliar, teaching strategies and learning tasks, along with the reframing of existing, more familiar ones. While the instructor had a BlackBoard designer account, simple access to course management software was not sufficient to create a quality hybrid course. The developing and maintaining of a hybrid course entails the redesign of course tasks and the ability to teach in both learning environments. These are essential skills for instructors making a shift to hybrid teaching. Beldarrain (2006) recommends that instructors need to re-examine the teaching and learning relationship to consider the definition of a hybrid learning community. Pratt and Palloff (2005) and Garrison and Kanuka (2004) have previously made similar recommendations. Bynner (2008) and Patterson (2008) both recommended instructors engage in professional development in adult education when crafting new ABE programs. Instructors need to engage in professional development for adult teaching practices and suitable course tasks in order to differentiate for learner needs and learning environments. In their recommendations for hybrid learning, Ramaley and Zia (2005) discuss the importance of examining pedagogy in the transition to hybrid courses:

The deep reflection required to convert a course or elements of a course into cyberspace forces a fresh consideration of learners' experiences in typical classroom settings. Many faculty shy away from this reexamination. Those who do, however, report that

cyberspace or the introduction of technology into their site-based classes can be a transformational and refreshing experience in which they rediscover the source of their original attraction to the academy and renew that commitment in exciting new ways.

(p.8.15)

Findings from the present study revealed that the instructor's original beliefs and good intentions to deliver a hybrid course were challenged by contextual constraints of appropriate professional development. She was provided BlackBoard training in June, 2005. The workshop focused on features of BlackBoard; it did not focus on hybrid teaching strategies, nor on differentiated learning for mature learners. When she became overwhelmed with meeting emergent needs alongside hybrid learning planning, the instructor reverted to traditional and familiar teaching strategies to reduce her stressors. Whether it emanated from the school board, the school administration, or the department head, the instructor required further support to bridge the gap between traditional and hybrid teaching; a leap she was not able to make on her own.

Show me the money. Designing and developing a hybrid course demands a commitment of time, money, and knowledge of technology in order to create a quality learning experience (Frazee, 2003; Garrison & Kanuka, 2004). Current practice consistently point to the extensive time commitment required to create quality eLearning. Based on their extensive research in the field, Thompson and MacDonald (2005) succinctly state that "quality eLearning courses are characterized by extensive upfront planning and design work, requiring a considerable investment of time and specialized resources (p. 234)". The present course was no exception. While the instructor was provided with time to attend initial BlackBoard training, there was no additional release time provided to strategically make effective revisions to her course. While the planning phase of the course spanned the summer months and one semester, the expectation that

the instructor devote her personal time to course revisions and retooling was unreasonable. Findings from Rovai and Jordan (2006) reveal that the absence of external supports, for learners or instructors, may lead to a negative learning experience. For example, they found that a lack of professional development decreased the creation of a quality learning environment. In the present study, the lack of money and time provided for the instructor created a tension between her desire and her ability to make substantial changes in teaching practice. This type of support may have translated into a decreased teaching load, ongoing professional development, collaboration with colleagues, or additional payment if an instructor is expected to develop course materials during the summer months. Without this, the instructor in the present study became overwhelmed. A strategic contribution of funds directed towards release time or training would demonstrate institutional commitment towards a quality change in practice.

Experience Builds Success

In building programs for mature learners, Patterson and Mellard (2007) assert that staffing patterns are connected strongly with learning gains; a good instructor can improve learning. Shank (2004) highlights an instructor's role as critical to the success of an eLearning experience. She suggests five competencies demonstrated by an effective online instructor: administrative, design, facilitation, evaluation, and technical. The competencies outline the instructor's ability to assure the smooth operation of a course, both in the proficient use of technology and designing, facilitating, and evaluating the structure of the course. Staffing considerations are more significant in the creation of a new program where the design team must commit to good pedagogy in the creation a quality learning experience (MacDonald & Thompson, 2005). Within the present study, the instructor's background, pedagogical approach,

perception, and commitment influenced the implementation, design, and delivery of the hybrid course.

Goldberg et al. (2006) correlated the instructor's previous online teaching experience with quality hybrid courses. Indicators such as the level of course attractiveness, learner enrollment, increased course performance, and overall learner satisfaction were revealed. Lanham & Zhou (2003) had previously uncovered similar factors; an experienced online instructor was better equipped to interconnect the two hybrid learning environments. Without experience with quality eLearning, an instructor may struggle to make proactive choices to scaffold a hybrid course. Jafari et al. (2005) reveal the instructor's role within a hybrid course as one that assists learners in understanding their independent role, and provides structures to assist both with work completion and the transition back and forth between eLearning and F2F environments. In the present study, data from learners highlight the good intent on the part of the instructor to attempt hybrid learning. Norm mused that "Mary was trying to use eLearning. She directed us to use Blackboard but then she had some assignments just on the computer in class (discussion group)". Findings from the present study indicate that despite good intentions, the instructor's lack of previous eLearning teaching experience did not equip her to design and deliver a hybrid course. In the present study, staffing allocations were not conducive to a change in teaching practice to hybrid learning. While it is unlikely the institution acted callously, it is more probable that the commitment and the skills required to develop and deliver a quality hybrid course were underestimated. An institution that carefully selects instructors creates conditions within which success is possible, if not probable.

Selecting learners. Ramaley and Zia (2005) put together a comprehensive profile of a successful eLearning learner, which includes the following attributes:

- establishing time-management strategies (i.e., scheduled times to check course);
- interacting in a meaningful way with peers on discussion forums (i.e., more than just reading postings, learners respond, question, or comment);
- using eLearning material in a meaningful way;
- asking questions meaningful to learning;
- staying motivated;
- establishing a learning buddy.

A hybrid course would serve those learners who prefer more informal, active and collaborative learning (Bynner 2008). The literature acknowledges that certain learners are more suited to F2F learning, while others may excel in a hybrid, or even eLearning, courses. By offering an eLearning test, “Is eLearning for you?” (Appendix F) the business department was modeling a belief that not all learners were suited for the BTT2O hybrid course. However, this did not translate into purposeful selection of learners; not all learners had completed the test, nor was it available at all times during course registration. Enrollment for the hybrid course was open-ended, not based on a learner’s profile.

Consistent with the DDLM, an instructor must manage both learners and course planning, while also making ongoing revisions or adaptations for emergent learner needs (MacDonald & Thompson, 2005). During the pilot phase of a course, course planning is more substantial while the instructor creates new tasks or adapts existing ones. In order to avoid contextual factors related to divergent learner needs, it is critical during this phase to filter suitable candidates. Within the present study, learners ranged from those who readily adapted to eLearning and

needed to move forward, and those who required substantial support to learn even the basic computer functions. The instructor became overwhelmed with demands of a teaching paradigm shift and divergent learner needs, and she resorted to more traditional, comfortable F2F teaching strategies. To enable a change in teaching practice, an institution could establish prerequisite skills or knowledge for course enrollment, especially during the initial stages of change.

The Learners We Have

Lowe and Holton (2005) identified attributes connecting adult learners and eLearning:

- attitude towards computers
- computer efficacy
- self-directedness
- individual learner characteristics
- learning style
- gender

They listed self-directedness and computer self-efficacy as most important attributes in eLearning success. Findings from the present study reveal four contextual factors connected with the BTT2O learners: technical skills, language skills, self-directedness, and attendance.

Divergent technical skills. Findings from the present study revealed that mature learners were a diverse group technologically. While many learners frequently accessed the Internet, a limited number had engaged in eLearning. Pratt and Palloff (2005) differentiate eLearning skills from those required in the classroom, highlighting that learners within a hybrid course must be able to learn in both learning environments. ELearning requires an ability to use a computer, as well as employ eLearning strategies effectively. Within the literature, there are contrasting views on the prerequisite skills required to engage in hybrid learning. Olapiriyakul and Scher (2006)

state that learners should have technical skills in order to participate in the eLearning components within a hybrid course. Conversely, Lin's (2008) study of four hybrid *university* courses revealed that even learners who did not have previous eLearning experience found hybrid learning beneficial. In the present study, the instructor perceived that a small number of learners were struggling with technical skills. This influenced her to question the appropriateness of hybrid learning for the entire group, even before implementing one eLearning session. She adapted her course to F2F delivery to decrease potential technical barriers for learners to engage in their learning.

While Lujan and DiCarlo (2006) acknowledge that mature learners perceive technology as a barrier, they indicate that limiting their educational exposure to technology puts them at a further disadvantage. Willems (2007) made recommendations for mature learners, indicating that limited exposure to technology marginalizes mature learners and educational programs should work to decrease feelings of alienation by decreasing the digital divide for mature learners. Roper (2007) argued that a hybrid learning builds technological skills. When provided with learning supports within a course structure (i.e. reference guides, scaffolded tasks that build essential skills, available technical services...), learners can learn successfully online and improve their technological self-efficacy. Within the present study, learners acknowledged that hybrid learning allowed them to build technological and eLearning skills, and considered it to be positive. When gaps in professional development did not present strategies to differentiate instruction, the instructor was not equipped to continue eLearning sessions for learners.

Diverse language skills. The population of mature learners within the present study encompass a subset of ESL learners whose English reading and writing skills were lower than their cohorts. Findings from the present study revealed that the language skills of this subset of

mature learners acted a barrier for eLearning. During eLearning sessions, the instructor expressed concern that ESL learners would not understand instructions or materials, nor be able to communicate effectively with their instructor or colleagues. Findings from some learners revealed a similar concern about their own ability to be successful online. For example, Maria stated that “asking questions through online is not as effective since you can’t understand very well what you want to do (temperature check)”. Mary’s concern for the success of ESL learners influenced her to adhere to traditional instruction, rather than risk learners feeling daunted by eLearning sessions. This finding contrasts those in the literature which promote eLearning as a positive for ESL learners. Some researchers suggest that ESL learners who may have difficulties with oral expression may be better able to participate online because they have more time to construct responses, or they feel less intimidated (Holton et al., 2006; Olapiriyakul & Scher, 2006; Radia & Stapleton, 2008). Similarly, other researchers suggest that quality eLearning can foster language learning (Radia & Stapleton, 2008; Willems, 2007). There is discrepancy between the instructor’s concern for ESL learners in the current study and recommendations in the literature. The diversity of English language skills within the BTT2O course created a contextual tension for the instructor. The instructor did not feel equipped to meet the needs of the ESL learners online, and felt compelled to shift to traditional delivery, rather than differentiate the hybrid course.

Attendance. Learner attendance created a tension for the instructor as she focused on making sound pedagogical decision. This tension was two-fold: a poor attendance pattern among mature learners and a workplace norm of expected daily class attendance. Findings from the present study expose the poor attendance among mature learners at the school as a barrier to building a hybrid learning community. An absence from the classroom prevented learners from

interacting with their peers or the instructor, as well as acquiring eLearning skills taught during a F2F session. Without interactions, social connections were not established and the foundation for a strong classroom community was eroded. The rotating absences among learners translated into the instructor's feelings that her implementation of eLearning skills was ineffective. She felt the need to teach and reteach topics for learners to collectively be successful. Rovai and Jordan (2004) indicate that without a sense of community, learners may feel isolated and tend towards decreased attendance or even, increased drop-out rates; this pattern is consistent among mature learners (Bradley & Goldman). However, Cornelius and Gordon (2008) describe how learning within a hybrid course can occur out of sequence, where the flexibility during eLearning sessions redefines course community in the absence of daily attendance. In the present study, the instructor was trying to establish a sense of cohesion while harbouring concerns that learners would struggle during eLearning sessions. This leads to questions such as: Was she concerned about the perception of her colleagues when her classroom was not full on eLearning days? Was she harbouring concerns that feelings of isolation during eLearning would translate into higher attrition rates? Was she comfortable with learners working at different paces? This attendance tension was influential in her decision to eliminate eLearning sessions; without a F2F community, it is possible that she did not feel an eLearning community would form.

A need for self-direction. While the BTT2O learners had diverse technical and language skills, their profiles revealed a consistent lack of self-directedness. Self-directedness is defined as the ability of learners to plan, conduct, and evaluate their learning tasks (Long & Holton, 2005). Self-direction could include an ability to manage time, to persevere when a learning barrier is met, or to complete work independently. Findings from Lujan and DiCarlo (2006) further describe mature learners as lacking in confidence and study skills. This contrasts predominant

characteristics of successful online learners described in eLearning literature: self-discipline, self-direction, an ability to use technology, and time management (Clarke, 2002; Packham et al., 2004; Rovai, 2003; Schrum & Hong, 2002). While the instructor acknowledged the potential for a hybrid course to foster self-direction, the mature learners' lack of self-direction became an influential factor in her decision to eliminate eLearning sessions. One senses that she made instructional decisions on behalf of her mature learners by returning to F2F sessions in favour of creating a positive learning experience for them. There is a possibility that those students who showed stress or struggled with learning proficiencies interacted with Mary more frequently than others. Learners who were adept at the learning process, whether F2F or online, would have simply focused on their work without need of interacting with their instructor. This would have skewed her perception that mature learners as a whole group were not able to transition to hybrid learning.

However, research focused on adult post-secondary learners engaging in hybrid learning has revealed increased engagement with the learning process, which enhances self-directed learning (Akkoyunlu & Yilmaz-Soylu, 2008; Bynner, 2008; Lin, 2008; Patterson, 2008; Roper, 2007; Twigg, 2003). Neumeier (2005) described the combination eLearning tutorials and F2F instruction enabled adult learners to acquire self-directed learning skills. By providing adult learners with some control of their learning, they will perceive learning positively and develop additional skills such as self-directedness and computer self-efficacy (Roper, 2007). Roper further explained that when adult learners can find the support they need, their self-efficacy should improve. However, the contextual reality of the present study prevented Mary from implementing hybrid learning; she did not feel comfortable allowing her mature learners to

transition through norming, forming, and storming in order to move into eLearning performance (Palloff & Pratt, 1999).

In summary, the first research question of this study asked how the contextual factors surrounding the hybrid course served to influence its outcomes. The answer seems clear: the outcome was a return to traditional F2F teaching. Both institutional and learner characteristics detracted from the instructor's ability to follow through with her commitment to deliver the BTT2O course in a hybrid manner.

Question Two

How does the instructor influence a hybrid learning experience?

As this case study so vividly illustrates, it was a challenge for the instructor to deliver BTT2O as a hybrid course. Many factors converged to influence her decisions. Contextual factors notwithstanding, the present research findings not only reinforce the importance of design and organization in a quality course, but also point towards the instructor's role in creating a quality hybrid course. A large body of research has described the instructor's key role in forming successful eLearning and hybrid learning experiences (Kaplan, 2002; Lanham & Zhou, 2003; Lin, 2008; Neumeier, 2005; Olapiriyakul & Scher, 2006; Shank, 2004; Skaalvik & Skaalvik, 2005; Thompson & MacDonald, 2005). Within the present study, four factors converge: estimating time commitments, assumptions about teaching and learning, planning for hybrid learning, and building a community of practice.

Estimating of Time Commitments

Within both learning environments (online and F2F) the instructor establishes the constructs of the learning community (e.g., its expectations, its routines, its tasks, and its outcomes), while also ensuring learner participation. To design and deliver suitable and effective

tasks, Mary needed to commit her time and energy. Findings under the theme of planning reveal that the instructor underestimated the time commitment required to make this teaching shift successful. In separate studies of quality eLearning communities, MacDonald and Stodel (2005), and Thompson and MacDonald (2005) identified an instructor's commitment as a necessity in responding positively to emergent learning needs. Throughout the study, the instructor was intermittently frustrated and disappointed with the limited extent to which she implemented the hybrid course. For example, comments such "I could have taken it a lot further with them, we could have done a lot more online days, we could have discussed the projects. (post-study interview)" are indicative of the tension that existed between her commitment to delivering a hybrid course and her available time once the course began. When emergent learner needs overshadowed the time required to plan further hybrid learning tasks, the instructor elected to return to traditional and existing F2F tasks. This meant she was not able to transition beyond the storming phase into the performing phase of hybrid course delivery (Palloff & Pratt, 1999).

Assumptions About Teaching and Learning

Nestled within the instructor's role in quality hybrid learning are the instructor's perceptions. These guide the creation or adaptation of course materials, even though Hummel (2006) asserts that anecdotal observations are not effective in guiding program changes. The instructor's early perceptions that a subset of learners (low-skill and ESL) would falter with eLearning were extended to the entire group of learners and to the implementation of eLearning itself. ELearning sessions were eliminated without the opportunity for all learners to try, struggle, and succeed. Differentiated instruction using external supports for these learners would have been an approach towards resolving these assumptions (Pratt & Palloff, 2005; Rovai & Jordan, 2004). Mary reflected on her shift in these assumptions by stating "I would love to do it

again and after knowing what I know now, I can already see how I'd do things differently and try to get over some of those hurdles. I think it's a multi-stage process (post-study interview)". These findings reveal the influential nature of an instructor's perception within the hybrid experience.

Fox and MacKeogh (2003) acknowledge the influences of the learners' needs and the constraints of the educational institution (i.e., availability of classrooms, technological facilities, timetables) in driving the design of a hybrid course. Roughly stated, the hybrid version of BTT2O was a course about computers to be delivered on the computer. It was also an elective credit, which meant that a diverse range of learners often enrolled in the course. Hybrid delivery was selected largely because of its potential flexibility to help mature learners balance their other commitments with education and its shift in instructor presence to help develop self-directed skills. The department head assumed that teaching a grade 10 course in a hybrid manner would be more straightforward than a grade 12 course. In exploring hybrid learning for adult learners, Holton et al. (2006) stipulated that learner self-directedness, technological comfort level, and available external supports should guide decisions related to course structure. Beyond anecdotal observation, there were no formal needs analyses conducted to assess how and if a hybrid course would suit mature learners. Did educators know what was working or what wasn't? Based on the limited assumptions, the needs of the learners were not formally incorporated within the new course modality. This contradicts recommendations from the literature to do so (MacDonald et al., 2001). Acting upon the assumptions would have enabled the instructor to better anticipate the needs of learners within the course structure.

At the same time, Mary was the only instructor at the school and within the board delivering BTT2O in this manner. A different course and more than one instructor would have facilitated collaboration and collective meaning making of hybrid learning for mature learners, as

opposed to a sense of isolation. The assumptions which led to the selection of hybrid delivery, BTT2O and the learners within it acted as a barrier to hybrid delivery within ASE. Future study should examine assumptions underlying pedagogical decisions related to program change.

Planning for the Hybrid Transition

Setting the Stage. Educators within the adult secondary school started with a desire to better meet the needs of mature learners. The BTT2O hybrid course was a departure from the traditional delivery. Course materials needed to be redesigned to integrate two learning environments: F2F and online. The redesign necessitated planning for a new course structure that would guide the development of learning tasks interwoven between the learning environments. This planning process is considered essential to construct an effective learning community that establishes an equilibrium between the F2F and eLearning environments (Akkoyunlu & Yilmaz-Soylu, 2008; Berge, 2002).

Prior to the onset of the semester, course planning defined the hybrid schedule: two eLearning and three F2F sessions weekly, and included an initial F2F period to introduce the navigation and use of the BlackBoard. The preliminary F2F period would be based on a chronological skill-based process to progressively immerse learners into hybrid learning (Appendix E). Two eLearning sessions had also been outlined: a learning object and an online quiz. Findings from the present study revealed that this phased approach was positive for learners. The gradual introduction of eLearning is consistent with other findings that a phased approach engages and empowers learners to become active eLearning participants (Dawley, 2008; Edwards, 2006, Johnson & Aragon, 2003; MacDonald & Thompson, 2005). Successful hybrid courses involve learners in seeing the value of learning and establishing confidence in eLearning sessions (Garrison & Kanuka, 2004). An effective hybrid course also uses eLearning

sessions to inform F2F sessions and vice versa, taking advantage of the best features of each environment (Olapiriyakul & Scher, 2006; Rochester Institute of Technology (RIT), 2005). Within adult education literature, Skaalvik and Skaalvik (2005) recommend that educators pay particular attention to the development of an eLearning environment to assist participants to feel secure, to ask questions, and to generate mastery. In the present study, the structures that introduced eLearning to mature learners created a positive learning environment for them and decreased feelings of insecurity with eLearning.

The show must go on... or can it? Once beyond the initial introductory period, hybrid learning moves forward. Technology and the eLearning environment offers many technological options for an instructor to build course tasks. From their case study, Olapiriyakul and Scher (2006) describe factors such as the use of technology, effective course design, and learning tasks that engage learners as those influential in creating a successful hybrid course. When asked to reflect on her ideal eLearning session, Mary's response indicates conceptual understanding of planning. She stated:

For the first online day on Thursday, ...I'm going to upload some kind of document that [the learners] have to download, fill in information and then upload again to the system to hand in to me. So for another example, there would be an online discussion period with the learners. Or, you know an activity then at a certain time they would go in and post, or anyway... I haven't structured it yet (pre-study interview).

As the study progressed, it became apparent that the instructor's planning did not extend beyond introducing BlackBoard. A large body of research offers suggestions on effective eLearning strategies such as collaborative testing, learning objects, animations, simulations, meaningful discussions, homework forums, case studies, educational games, and virtual experiments to

create an active online and/or hybrid learning environment (Bynner, 2008; Lin, 2008; Lujan & DiCarlo, 2006; McCray, 2000; Pratt & Palloff, 2005; Ramaley & Zia, 2005; RIT, 2005; Roper, 2007; Sparrow, 2004). Findings from the present study reveal that the instructor was not able to plan diverse technological experiences within a hybrid course.

Rovai and Jordan (2004) caution that it's not the technology that engages the learners, it's the learning activities within the course; a pitfall of hybrid learning is a focus on the technology itself, rather than using it as a tool for learning. Willems (2007) described similar tendencies in his research by stating "simply putting the materials 'out there' in new formats does not necessarily equate to individuals being able to fully access or engage with them (p. 433)". Findings from the present study revealed that Mary had planned to upload some traditional F2F course tasks within BlackBoard, rather than a redesign of the structure and the delivery of tasks; in the end, she reflected that her planning had not been effective. For example, Mary reflected "It's stuff you do all in class, but it is transferring those lessons, they don't always transfer online (post-study interview)". A case study conducted by Lin (2008) of four separate hybrid courses revealed that learners need to be supported in the transition back and forth between two learning environments. Lin's findings revealed that instructors needed to do more than just upload materials to the web; activities should require learners to perform basic academic tasks, while interacting with each other (i.e. read a response and provide analysis for a fellow learner). Oblinger and Oblinger (2005) suggest that the intent of hybrid instruction is to decrease "sage on the stage" type instruction and focus more on producing effective learner-centered environments. Findings revealed that planning focused solely on a familiarity with BlackBoard prevented the evolution of the course. In the absence of a plan, instructors do not have a roadmap to follow, or stray from as learners' needs redirect the course. As a result, they may lose their way. Gaps in

professional development have been previously identified as a barrier to effective planning. The end result was clear: the absence of a comprehensive plan to guide instruction detracted from moving the course beyond a taste of eLearning into active hybrid learning.

Building a Community of Practice

The BTT2O hybrid course was a learning community intended to be unlike its traditional counterpart. Within a F2F classroom instructors and learners do not "expect to define social space and interactions. They expect to find their place within it" (Anagnostopoulos, Basmadjian, & McCrory, 2005, p. 1699). Kahn and Linquist (2005) succinctly described how technology has altered educational course delivery: "we have the ability to teach and to learn through the thoughtful use of technology in the delivery of diverse, innovative, social, engaging, relevant, anytime/ all-the-time discovery, bringing the world to the course wherever it may be found, p.62". According to Webster, a community is "any group of living things in the same area or having interests, work,... in common". Contemporary learning communities now challenge Webster's geographical assumption through the advent of technology. The shift to a hybrid delivery necessitated a revision of the course landscape. This revision was not simply a matter of adding an eLearning community without concurrently adapting the F2F one.

Constructs of a hybrid community. A body of adult education research recommends the development of a strong sense of community for mature learners. This community influences the satisfaction, participation, and in turn, school performance of learners (Beldarrain, 2006; Olapiriyakul & Scher, 2006; Rovai & Jordan, 2004; Skaalvik & Skaalvik, 2006).

Collaborative learning communities are held together by distinct operating norms, formal and informal roles for members, trust built to ensure quality interactions, and a shared sense of purpose (Kaplan, 2002). Kaplan identified 3 types of approaches to engage learners, as a basic

starting point for collaborative eLearning or hybrid environments. These approaches are connected with people, process, and technology:

- *People*: clearly define roles which support individuality; create subgroups;
- *Process*: establish operating norm, foster trust, create a buddy system;
- *Technology*: provide easy-to-use collaborative environment.

Ho and Burniske (2005) specify that the F2F community needs to be fostered and maintained throughout a hybrid course in order to enhance the eLearning community. In fostering the classroom community, Milne (2006) argues that learning tasks should include social interactions, which increasingly motivates learners to connect with their peers. Frazee (2003) suggests relevant learning experiences, both F2F and online, to build a successful hybrid learning community: collaborative small group assignments, assignments that require learners to research and present resource materials to their peers, group work on simulation, case studies, shared facilitations, homework forums, asynchronous reading and discussion questions, and/or papers posted to the course website with mutual feedback required. Klein et al. (2006) also specify that peer assessment where learners receive reflected appraisals from others builds positive academic self-concept and achievement for mature learners. Olapiriyakul and Scher (2006) suggest leadership roles, especially during online discussions, as well as course evaluations including participation criteria as constructs encouraging a collaborative environment.

Findings from the present study indicate that the F2F community remained traditional. Tasks were independent, and there was little evidence of collaborative work. For example, learners were assigned a topic upon which to create an independent PowerPoint presentation; there was no structure to guide interactions, elicit feedback or collaborate, nor was the topic relevant. The absence of collaborative tasks, or opportunity to interact with peers, was a barrier

in building a sense of F2F community, much less a vibrant hybrid community. While the need for collaborative, relevant tasks is reflective of the need for effective staff training and support, and for planning of collaborative hybrid course components, the end result of the present study is the absence of positive constructs to build any hybrid community.

Scaffolding for community. Depending on course learning tasks, the inclusion of F2F and eLearning within a hybrid course creates potential for two disparate or disconnected environments. Building a strong connection would build the spirit of one hybrid community, rather than two separate ones. Kaplan (2002) offers the term “digital sandwich” to describe the connectivity between the two learning environments. F2F interactions are extended and strengthened online. Online interactions strengthen group interactions before, during, and after F2F sessions, which facilitate deeper collaborative learning. Mary did make one attempt to create a “digital sandwich” by having learners post a travel brochure to a discussion forum, however, she did not require learners to interact with each other online. Only 15% of learners uploaded a file to the forum. This finding suggests a need to scaffold expectations for learner postings. For example, Olapiriyakul and Scher (2006) described a strategy interconnecting F2F and eLearning: the creation of a crossword puzzle. Learners built their own online crossword puzzle on a given topic. Each learner was assigned a colleague’s crossword to complete online, and in the next F2F session, learners provide feedback to each other. This strategy established active learning in both environments and strengthened the bond between them.

Information technology enables at least four major categories of interactivity: people-to-people, people-to-tools, people-with-concepts, and people-with-contexts (Ramaley & Zia, 2005; Sparrow, 2004). For all learners, research points to the importance of eLearning environments which are active, social, and learner-centered. The formation of a spirit of community is essential

in quality eLearning (Estabrooks, Thompson, Lovely, & Hofmeyer, 2006; Thompson & MacDonald, 2005). The development of a learning community in such a forum is fostered through coaching learners to participate online, conducting adequate learning tasks and articulating and managing clear expectations for participation in order to enable satisfaction of learners (Dawley, 2008; Hartman, Moskal, & Dziuban, 2005; Johnson & Aragon, 2003; Shank, 2004; Stodel et al., 2006). Ho and Bernike (2005) also promote regular online discussion as a hybrid course construct that improves participation and promotes relevance. In the present study, the instructor did not present procedures or expectations for online participation; learners did not interact online. Learners in the BTT2O course were not required to interact creatively or negotiate the features of their learning community, nor did they access using the tools, knowledge, and other resources the community had to offer. Without regular attempts to access and use the eLearning environment, the hybrid community did not evolve in the present study. The absence of a scaffold to guide any course interactions acted as a barrier in developing a hybrid community. If participation or interactions had been encouraged or expected during even one eLearning attempt, perhaps the eLearning community may have revealed itself. Professional development focused on effective eLearning strategies could have supported the instructor towards scaffolding that promoted interactivity and community.

Informal interactions among learners in the present study were noted as minor instances of an emerging F2F community. Learners collaborated informally, and in turn, they involved the instructor in their emergent community. In essence, they were forming their own sense of community. The experience was described enthusiastically by one of the learners: “There was several of us this semester who showed each other things...[Another learner] showed me how to use this [feature] in PowerPoint...we showed it to [Mary] and she hadn't seen that specific thing

either (Harriet, discussion group)". Within an eLearning community, Thompson and MacDonald (2005) indicate that even when learners have a diverse sense of purpose, a social infrastructure can make learning more personal and academically satisfying. These findings could be extended to a hybrid community. Findings from Cornelius and Gordon (2008) revealed that collaborative elements of a hybrid course re-engaged even the reluctant learner with learning. In the present study, mature learners were seeking a sense of community independently; the instructor could have put in place further opportunities for learners to interact, both formally and informally, with the goal of building a stronger sense of community. The instructor unknowingly did not make regular attempts to foster either learning community. In summary, the absence of connections within and between the two independent but interwoven environments detracted from the hybrid course before it could emerge.

In summary, the second research question of the study asked how the instructor's actions influenced the outcomes of a hybrid course in its infancy. The absence of both a big picture plan to guide the scaffold of engaging learning tasks or creation a learning community, and of professional support or collaboration converged to obstruct the transition from traditional to hybrid learning. Coupled with emergent learner needs, the instructor was not able to follow through on her aspiration to teach using hybrid learning and resorted to traditional delivery.

Overarching Research Question

What are the experiences of mature learners participating in a hybrid course?

By exploring the two specific research questions, a snapshot of what happens in an ASE hybrid course emerged. We also now have an understanding of how factors such as the workplace context, learner attributes, and instructor attributes or actions both facilitate and

discourage collective meaning making within a hybrid course. Using the themes explored in Chapter 5 and the above factors as a springboard, we are in a position to explore how a hybrid course may influence mature learners. Despite a desire for a more extensive hybrid learning, mature learners reflected on how blending eLearning with F2F learning satisfied their needs. There are four constructs which offer a starting point to describe their experiences: course satisfaction, engaging learning tasks, instructor access, and flexibility.

Course Satisfaction

Overall, the course outcomes from the present study revealed that hybrid learning was, in principle, positive for learners. The blend of F2F and eLearning sessions, but also the integration of eLearning technologies in remaining F2F sessions, was motivating for learners. The use of BlackBoard within this BTT2O course created an authentic experience for learners, and in turn, motivated them to learn. Many learners felt that building eLearning skills was relevant to their future. Klein et al. (2006) recommended building courses that use technology in a way that mirrors how learners use technology in their own lives. In this way, the course would be inherently motivating for learners. Similarly, Holton et al. (2006) report findings that connected relevant course content within a hybrid course with motivating adult learners. Beldarrain (2006) also specifies that integrating technologies within course content increases the satisfaction and school-performance of mature learners. Roper (2007) suggests that giving mature learners some control over their learning not only enables the development of self-directedness and computers skills, but also increases their satisfaction with learning. In the end, the mature learners' course satisfaction was limited by the extent of the experience itself; these narrow opportunities expose the potential for hybrid learning to satisfy and engage mature learners.

Learners indicated that the two eLearning sessions met their learning needs through the flexibility the sessions afforded, and by establishing different ways to interact with each other and with their instructor. In effect, learners were satisfied with their course. While a more comprehensive hybrid course would clarify these findings, they are consistent with emergent findings in hybrid literature. A number of researchers have correlated hybrid learning with increased course satisfaction (Basic Skills Agency, 2007; Bynner, 2008; Cornelius & Gordon, 2008; Lin, 2008; Patterson, 2008; Roper, 2007). In fact, Cornelius and Gordon purport to hybrid learning experiences as being superior to either eLearning or F2F courses.

Engaging Course Components

All key stakeholders consistently shared a positive attitude towards engaging in learning via the course management tool (BlackBoard), online quizzes, and learning objects³. Within the literature, online quizzes, PowerPoint learning objects, and online discussions were indicated as positive aspects of eLearning (Bradley & Goldman, 1996; Jafari et al., 2005; Pratt & Palloff, 2005; Skaalvik & Skaalvik, 2006). Neumeier's (2005) findings incorporate the inclusion of adult teaching methods (i.e., problem-based, experiential, discussion-oriented), and the opportunity for self-help/peer-help within a course to establish effective hybrid learning environments. Olapiriyakul and Scher (2006) further identify course announcements, the electronic grade book and online quizzes as favorable constructs. They specify, however, that instructors need to be consistent in the use of these constructs to be effective.

Learners classified navigating BlackBoard as authentic and relevant. They described how eLearning skills would be expected in college settings. The hybrid course provided opportunity

³ A learning object or tutorial may use PowerPoint as a software medium to deliver a lesson, information, or instructions on a given topic. Within the present study, the tutorial guided mature learners to access and use PowerPoint itself; in another context, a tutorial may engage learners in a science topic such as the 3 states of matter.

for learners to reflect on attitude and practice within their own learning (Dawley, 2008). Garrison and Kanuka (2004) recommended learners seeing the value of learning and establishing confidence in eLearning sessions in order to establish successful blended learning. In this regard, learners could place their acquisition of eLearning skills into their own contexts.

McCray (2000) explained that PowerPoint learning objects, including audio and visual components, were perceived by learners as useful eLearning materials. Learners engage with the learning objects on their own time and at their own pace. External supports such as learning objects enable learners to work independently and provide them with a sense of control. Patterson (2008) asserts that independent eLearning within a hybrid course provides a feeling of control, while still maintaining a structured approach to learning within F2F sessions, which include the physical presence of the instructor. In the present study, even the limited hybrid learning experiences gave mature learner some control over their learning; they seemed to develop additional academic skills and confidence. Providing mature learners with a sense of control over their learning process is suggested within the literature (Roper, 2007; Patterson, 2008; Bradley & Goldman, 1996).

An online quiz is one effective strategy for engaging learners online (McCray, 2000). In the present study, online quizzes were positive constructors for learners because they increased interactivity. Learners were able to interact with the quiz by inputting their responses, automatically receiving feedback, and revising their responses accordingly in a continuous loop until they were satisfied with their learning. Learners considered these components to be authentic and relevant. These findings were consistent with Lin's (2008) findings which revealed that learners considered the quiz feature and the immediate feedback to be positive within a hybrid course.

Learners expressed a desire to transition to more active eLearning with statements such as “not all information that I wanted was there (Mustapha, post-course survey)” or “...we didn't really get to experience the hybrid course from home, maybe ...it would have been fun (Norm, post-study survey)”. Many expressed a desire to incorporate more audio and video components into the course, along with online discussions or chats. Further strategies such as virtual experiments, simulations, or online games have been recommended for hybrid learning (Jafari et al., 2005; Pratt & Palloff, 2005; Skaalvik & Skaalvik, 2006). Technological advances also offer new possibilities for hybrid courses: blogs, wikis, and homepages (Jafari et al.; Beldarrain, 2006; Oblinger & Oblinger, 2005). These features would empower learners through active self expression, while also mirroring how they may use technology in their own lives.

An Appreciation of Flexibility

ELearning allows learners to complete their course work any time and any place they can access a computer (MacDonald & Stodel, 2005). With a focus on hybrid courses and language teaching and learning, findings from Neumeier (2005) indicate that courses should offer flexible yet regular timetables to accommodate learners' life commitments and a relaxation of traditional school rules that expect learners to be present each and every class create an environment more suitable for mature learners. Findings from the present study promote flexibility as a positive construct of hybrid courses. Hybrid learning provides learners with the flexibility to learn independently online and to learn with a group when F2F. It also gives them flexibility with access to their instructor, whether via email, phone, or in person. For learners this meant that they were not required to be physically present in class every day. This type of flexibility enables mature learners to balance their life commitments and their education. For example, a learner

who has been given a morning shift at work has the flexibility to complete course tasks without the consequence of missing class.

The diverse skill set of mature learners also translates into diverse rates at which they learn. Findings revealed that learners had planned to take advantage of the flexible timetable of the planned hybrid course by reducing travel to school on certain days, and learning at their own pace and on their own time. The potential for a hybrid course to be flexible is well documented in the literature, allowing learners more control over their learning (Bynner, 2008; Jafari et al., 2005; Lin, 2008; Patterson, 2008; Roper, 2007).

Within the present study, learners expressed regret at the loss of flexibility when eLearning sessions were removed from the course. The small number of eLearning sessions limited their opportunity to demonstrate their ability to be successful both F2F and online. At the same time, there was a contextual tension associated with the flexibility of attendance on eLearning days. Many of the learners were enrolled in other courses which continued to require daily attendance. Regardless of the BTT2O session, these learners would be required to be present in the school at a different point during the day. This flexibility tension notwithstanding, the present study leaves unanswered questions such as “Does the flexibility of hybrid learning enable mature learners to engage and persist with their courses?”.

Instructor Access

The data in this inquiry reflect a jumble of perceptions and expectations about how learners preferred to access their instructor. Data from the present study did not paint a clear picture on how the eLearning communication mechanisms (email, discussion forums, phone calls) would encourage mature learners to persist with their course work. Some learners commented that they preferred direct F2F access to communicate with their instructor, but

subsequently suggested a preference for a course with three weekly eLearning sessions. Others associated virtual interactions via email or phone, or F2F interactions at scheduled, but optional, drop-in times with meeting their learning needs. While there may be opportunity for learners to further explore and understand the mechanisms for communication within a hybrid course, it reveals that mature learners value an instructor's presence in their learning process. Findings from Lin (2008) connected positive student learning with an instructor's focus to increase learner-learner and learner-instructor interactions in both online and F2F environments. Dawley (2008) and Stodel et al. (2006) also linked an instructor's presence with promoting effective online interaction and work completion.

Researchers have observed that an instructor's presence is an essential construct of a successful hybrid course (Jafari et al., 2005; Lin, 2008; Rovai & Jordan, 2004; Skaalvik & Skaalvik, 2005), as well as in quality eLearning (Goldberg, Haase, Shoukas & Schramm, 2006; Stodel et al., 2006). An instructor who interacts with learners in a consistent manner both online and F2F fosters positive relationships, and encourages engagement and persistence. This interactivity allows instructors to encourage learners to employ techniques of good eLearning by guiding learners to become more critical and reflective learners themselves (Olapiriyakul & Scher, 2007). Concurrently, interactions with the instructor inform essential and positive responses to emergent learner needs (MacDonald & Stodel, 2005).

Contributions to Literature

The DDLM identifies many of the barriers and facilitators of hybrid learning within its conceptual framework (MacDonald et al. 2001). Within their conceptual framework, Klein et al. (2006) pinpointed learner and instructional characteristics underlying motivation to learn and subsequently, affective and cognitive course outcomes. The five stages of Passerini and

Granger's (2000) hybrid development model suggest an interconnected sequence of steps to include analysis, design, development, evaluation and delivery. Within ASE, little research has focused on programs for mature learners delivered using hybrid learning, or even eLearning. The present study intended to address this shortcoming. The case within the study stopped short of a transformation of a traditional F2F course into a hybrid course. Despite good intentions and vision, many factors converged to reveal how contextual and instructional factors influence the course outcomes. Figure 8 reframes hybrid learning to integrate learning theory and instructional models, and reflect findings from the current study. It puts emphasis on the extrinsic factors present within a school by nestling the course experiences within them.

The Context

Situational factors are inherent in all hybrid courses (Klein et al., 2006). Within the context of the present study, the hybrid course was mediated by factors connected to context of the institution (school) and the course. Within the broader school climate, there were *policies*, eLearning *technologies*, and computer *facilities* which provided the conditions conducive to the creation of eLearning or hybrid courses. Without such conditions, eLearning cannot be supported. However, the extent to which institutions commit *money* and *time* towards offering professional learning or quality facilities for educators may differentially impact the success or failure of a change in practice which incorporates eLearning.

An innovation in teaching practice is accompanied by a shift in workplace *norms*, where colleagues or supervisors may question or support the change. A *principal's direct or indirect support* of a change through funding, staff dialogue, accessing effective training and technical support can mediate the educator's *accountability* towards the desired direction of programs (Patterson, 2008). When a principal initiates and sets clear direction for a change, he or she can

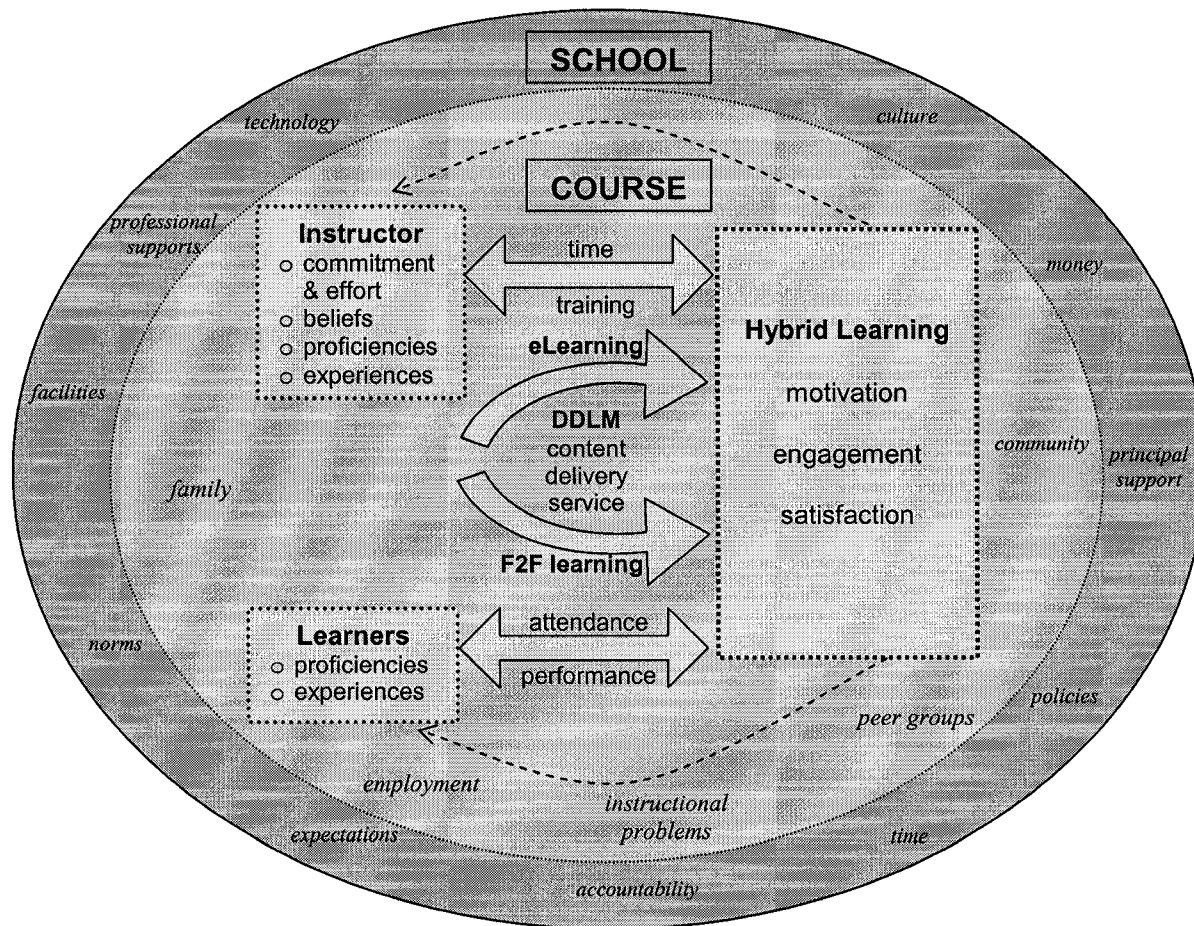


Figure 8. A framework for ASE hybrid courses.

have a positive impact on student achievement. When school leaders fail to focus on the school and classroom practice, their leadership can have a negative impact (Waters & Grubb, 2004).

Within the secondary school context, the influence of this type could also extend to a department head. Acting as a change agent, a school principal can establish a *culture* of support. Colleagues who engage in dialogue about the reasons behind a change are better prepared to take ownership over making the change happen, or encourage each other during the process. Changes that isolate staff members and fail to celebrate innovators are doomed to fail from the onset (Ash & Persall, 2001). Within the present study, contextual factors worked against the instructor, creating

conditions where a hybrid course was doomed even before it began. Without supports of time, money, or professional development, along with diverse learner needs, efforts to transition to hybrid delivery were thwarted.

Within the smaller course context, situational factors can move to mediate how a hybrid course is delivered. Learners and instructors alike are influenced by their domestic responsibilities of *child care* and *family*, their *peer groups*, and their *transportation*. These factors can move to prevent or enable either a learner or an instructor to be present and prepared to learn and work on any given day. Together, the instructor and the learners build a sense of *community* within their course, where they experience *instructional problems* from different vantage points. An instructor may perceive instructional problems as a sign to change delivery from eLearning to F2F learning, whereas a learner may perceive an instructional problem as a frustration. The present study suggests that an absence of community served as a barrier to hybrid learning. Further research could clarify the magnitude of any or all of these contextual factors on the ability for an educator to implement a change in practice, or deliver a hybrid course.

The Course

Within the present study, what emerged were the influences of the instructor and the learners. Both their *proficiencies* and *experiences* converge during a course. Those who arrive with proficiencies are better able to engage in learning. Those who have had previous positive experiences with learning are better equipped to engage in subsequent learning. Either the learner's or the instructor's own extrinsic contexts including employment, domestic commitments, peer group, or instructional problems differentially influence the evolution of their

learning within the course. While the instructor and learners collectively form a community, their individual contributions influence the course experience.

Learners. Mature learners perceived hybrid delivery as a learning facilitator. Through their *attendance* and *participation* in class, learners *communicate* to the instructor how they are learning and that they are engaged in the course. The ongoing dialogue, interpreted through verbal and non-verbal cues, sets the stage for the instructor to interpret how the course is engaging and satisfying to learners and make changes accordingly. In the present study, weak attendance patterns may have acted as a warning flag to the instructor for attempting hybrid delivery with mature learners; at the same time, such attendance patterns served as a driving force *in favour of* hybrid learning. This aspect of the present study points to the need to make data-driven decisions to inform and direct quality changes in teaching practice, rather than relying upon the anecdotal assumptions of educators (Waters & Grubb, 2004).

Instructor. An instructor selects and constructs the *content*, *structure*, and *service* within a course, while also seeking technical and professional supports to inform his or her teaching practice (DDLm; MacDonald et al., 2001). Within the hybrid course, an instructor may choose either eLearning and F2F learning. In the present study, the instructor perceived barriers within the hybrid course constructs. In the absence of effective planning and course scaffolding, the hybrid learning was not set up for success. When combined with the contextual constraints in the present study, the absence of planning and scaffolding presented too many hurdles, and the instructor reverted to F2F teaching. Future research into hybrid learning in ASE should focus on effective tasks that engage mature learners, along with the scaffolding that supports them.

First and foremost, an instructor's level of *commitment* and *effort* in developing, delivering and adapting a course into a hybrid modality are integral to creating a successful

hybrid experience. An instructor must be prepared to put forth extra effort and energy to foster a shift in teaching and learning modalities. This encompasses the creation of effective teaching materials and the facilitation of a shift in student learning. Shank (2004) clearly states that an instructor's commitment is even more critical within eLearning, as "the instructor has to help learners overcome potential barriers caused by technology, time, and the way interactions with learners and the instructor occur (p.1)". If the instructor falls short of this commitment, the quality of the learning experience will be limited.

While *beliefs* are also mediated by the school context, they also serve to enable or detract from a hybrid course. If an instructor has assumptions that learners will be successful, he or she will continue to revise teaching practice until the right fit is found. If an instructor assumes the contrary, he or she may abandon the path to hybrid learning altogether. Within the present study, the instructor perceived barriers to learning associated with both the learner's skills and the constructs of the hybrid course.

The instructor's attributes converge where the reality of planning time and the need to engage in effective professional *training* influence the level of quality within a hybrid course. Consistent with Bynner (2008), the absence of effective professional development in the present study added another challenge in the process of establishing a successful ASE hybrid learning environment. Bynner described effective training as grounded in adult education, eLearning, and hybrid learning.

Hybrid Learning

In the present study, course satisfaction, engagement, and enthusiasm were outcomes arising from the hybrid course experience. When presented with eLearning tasks within the hybrid course, learners were *engaged* and *motivated* to learn. In reflecting upon the authentic

nature of acquiring eLearning skills, learners were *satisfied* with even a small taste of hybrid learning. The study has served to confirm the potential for hybrid learning to establish a quality course for mature learners. This finding contributes to the literature where similar findings have been associated with adult learners (Klein et al, 2006; Lin, 2008).

Recommendations for Practice

Akkoyunlu and Yilmaz-Soyla (2008) emphasized that data collected on an individual's views of hybrid learning and its implementation contribute to the improvement of hybrid courses for learners. The present study offers an alternative approach for delivering programs to mature learners. Therefore the data collected about participation, delivery, service, content, and outcomes inspired ten key recommendations that could serve to guide the design, development, and delivery of hybrid courses for mature learners at the secondary level. These recommendations are listed under three headings: systems support, course structure and tasks, and enabling learners.

System support

The first recommendation is to ensure a culture of support surrounding an educational change before embarking upon the journey. Developing successful hybrid courses needs a strong commitment from the organization itself. It is critical for risk-taking educators to receive support from their colleagues and their administration to sustain them through challenges and successes. An administration that sets aside time and budget to assist an educator through planning release time, training, balanced teaching loads, timetables, or other supports creates optimal conditions to bolster the tumultuous implementation process. At a more fundamental level, the support of the administration will be reflected in the daily interactions among colleagues. These types of workplace norms can serve to feed or destroy the roots of a budding change.

The second recommendation is to provide professional development opportunities that focus on learning, rather than tools. Instructors need to re-examine learning in their own classrooms to define a hybrid learning community for themselves (Beldarrain, 2006). Professional development that focuses on both the technical and pedagogical considerations for teaching in the F2F and eLearning environments would enable instructors to make informed choices for designing and delivering their hybrid course. For example, exemplars could provide quality materials for instructors to examine and analyze. The materials could include of quality eLearning tasks or a series of tasks that span both virtual and F2F environments. With respect to mature learners, the incorporation of relevant adult learning principles within professional development would also support instructors to meet the needs of these learners (Patterson, 2008).

The third recommendation is to make critical choices when selecting instructors for hybrid courses. Hybrid learning is fundamentally a new teaching and learning approach. Even more critical in the initial offering of a course, an instructor must commit time and effort to the redesign of a course into a hybrid modality and to the subsequent modification of the course based on learners' needs. An instructor knowledgeable about quality eLearning strategies and skilled with using the eLearning environment will be more successful in creating connectivity between the F2F and eLearning environments.

Course Design and Tasks

The fourth recommendation is to set the stage for a hybrid course. Consistent with findings from Thompson and MacDonald (2005), skillful planning and extensive organization are essential for creating positive first impressions. A course structure and learning tasks established prior to the onset of the first session provide a road map for the instructor. Course

structure and tasks can be adapted as emergent learning needs arise. At the same time, learners will begin to build their understanding of hybrid learning from the onset of the course.

The fifth recommendation is to explore the diverse uses of technology for enhancing the learning community. The findings revealed that learners felt validated by exposure to new technologies. While older learners may see technology as a barrier, exposure to technological strategies decreases the digital divide (Willems, 2007). Concurrently, a diversity of technological tools within a course also suits learners considered to be part of the NetGeneration; these learners need to learn online the way they use technology in their own lives (Klein et al., 2006). For example, rather than create a homepage within BlackBoard, a learning task could direct learners to visit each other's FaceBook pages.

The sixth recommendation is to create learning tasks that stimulate learner interaction. Structuring tasks that require learners to work collaboratively both F2F and online would not only help learners uncover how to learn both online and F2F, but also help build the spirit of community. Findings from Thompson and MacDonald (2005) reveal that learners find interactions with other learners to be beneficial. In the present case, learners created a travel brochure independently; alternatively, they could have built the brochure in a collaborative F2F session and subsequently validated each other's work online. Reframing tasks in this regard would increase both interactivity within and connectivity between the two learning environments.

The seventh recommendation is to create an eLearning guide. Once the course has progressed beyond an introduction to BlackBoard, the learner's need to feel confident with the eLearning components of the course remains. Findings from the present study indicated some mature learners have low self-directedness in their learning. Bradley and Goldman (1996) point

out that these types of learners require more external supports. For example, a user's guide could contain topics such as navigating BlackBoard, using its tools, and managing an online discussion forum efficiently. Such a guide would be useful for a range of courses, thereby establishing a more global set of resources for any hybrid course.

The eighth recommendation is to establish a mechanism for learner feedback. Learners in the present study were able to provide feedback through completion of the surveys and participation in the discussion group. A subsequent hybrid course should incorporate structured feedback mechanisms. Employing the quiz function with BlackBoard or a website such as SurveyMonkey (www.surveymonkey.com) would allow learners to anonymously provide ongoing input into their learning experience⁴.

Enabling Learners

The ninth recommendation is to enable learners to assess their readiness to select a hybrid learning modality. Findings from this inquiry revealed that mature learners needed to build both computer efficacy and self-directed learning skills. Lowe and Holton (2005) determined that skills such as these play an important role in quality learning for adult learners. Prior to the course registration, a workshop could introduce eLearning and stimulate learners to assess their suitability for hybrid learning, based on learning style and skills. Learners could subsequently choose to enroll in the hybrid or F2F course based on their experiences in the workshop.

The tenth recommendation is to develop a common understanding of learning within a hybrid course. Just as educators learn how to teach, learners must learn how to learn in two

⁴ The six-phase model on gathering feedback suggested by Hummel (2006) could guide the development of feedback tools, with consideration given to the 50-point course assessment scale developed by Akkoyunlu and Yilmaz-Soylu (2008).

learning environments. Garrison and Kanuka (2004) argue that successful hybrid learning involves learners seeing the value of learning and establishing confidence in the eLearning sessions. Holton et al. (2006) correlate an increase in motivation with learners working towards something tangible and thinking about their own progress. Course tasks that require learners to make critical choices for themselves, rather than under the direction of their instructor, become inherently more authentic and require structured self-directed decision making. For example, rather than having learners create a travel brochure, learners could be asked to create a brochure for their current career goal. Interweaving “how are we learning” moments into course sessions would bring learning to the forefront. For example, at the end of a week, learners could be asked to reflect on how their learning differed from a traditional course.

In summary, the application of the ten recommendations stemming from the present study would significantly transform subsequent BTT2O hybrid courses. Based on my personal experience and the learners’ comments, these changes would create a positive first impression on learners, support an instructor to delivery the course, and enable further exploration of this type of learning for consideration by other ASE educators. Even with limited exposure, mature learners appeared interested, committed, and enthusiastic about hybrid learning at the secondary level. A second opportunity to engage in hybrid learning may help both learners and instructors achieve “the readiness to learn” as described by Knowles (1984).

Chapter 7: Conclusion

In essence, the present study explored how a hybrid course stimulated mature learners to engage in learning. In order to meet this goal, the learners' experiences, alongside those of the instructor, were examined in connection with the process followed to design, develop, and deliver hybrid course content. This final chapter examines the significance of this study's findings through the lessons that were learned in the fields of adult basic education and hybrid learning for practices that engage learners. Some of the strengths and limitations of the study will be presented, as well as proposals for future directions for research on the topics of hybrid learning and adult basic education. Finally, personal thoughts on my research journey through the case study will be shared.

Lessons Learned in Adult Secondary Education

The hybrid learning course in this case study had minor successes but major setbacks. Despite good intentions to better meet the needs of mature learners through hybrid learning, the hybrid course was not fully implemented. Only two eLearning sessions were delivered, however, these sessions revealed the facilitators of hybrid learning. Even with limited experiences, mature learners were engaged and satisfied. Knowles (1984) postulated that adults learn if they are ready to learn. Based on this postulate, I recommend that educators create a hybrid learning environment that capitalises on the learners' readiness to learn. These mature learners were ready to learn online via quizzes and discussion forums; they indicated satisfaction with using a PowerPoint eLearning object. In effect, they were engaged in their learning process during eLearning sessions. Willems (2007) proposed that hybrid learning programs decrease the feelings of alienation felt by mature learners. In this regard, a hybrid course offers the potential to reduce marginalization of mature learners in two ways: exposure to eLearning technologies

and the flexibility to control their own learning. This case study revealed the possibilities to nurture mature learners to become active in their own learning process through a hybrid community. Future hybrid courses will shed further light onto these possibilities.

Within educational programs, Milne (2006) acknowledged that learners are increasingly motivated by social interaction; contemporary pedagogy should incorporate collaborative and cooperative activities. What emerged from this case study was a recommendation to build community to enrich a hybrid course. Dawley (2008) argues that collaborative learning opportunities enable learners to change their attitude towards learning. For example, learners who are recognized for their effective computer and eLearning skills could be assigned leadership roles within both the F2F and eLearning environments to increase the potential for informal interactions among learners. Concurrently, a PowerPoint project that necessitates learners to collectively determine presentation design and individually contribute slides to the final product would not only build a sense of community, but also link both F2F and eLearning environments.

Mature learners return to school intent on completing an OSSD. Yet, their profiles indicate that many possess a low or unstable academic self-concept. When faced with either a conflict between life's commitments and their education or with an obstacle in their learning, their attendance falters (Bradley & Goldman, 1996). In the present study, the characteristics of mature learners can be simultaneously viewed as reason to offer hybrid learning and as an obstacle to its actual implementation. While learners expressed a desire for more hybrid learning sessions, the instructor perceived a lack of necessary skills. As Merriam and Caffarella (1999) pointed out, "learners must connect what they have learned from current experiences to those in the past as well as see possible future implications" (p. 223). This case study illustrated the

importance of a purposeful transition from the old to the new to successfully immerse mature learners in a hybrid environment. For example, mechanisms to identify the proficiency of learners at the onset of the course and to differentiate instruction would enable all learners to transition to hybrid learning. Further hybrid learning opportunities should be implemented to allow the learners and instructors to assess for themselves whether hybrid learning meets their needs.

The major setbacks arose when the course did not transition into hybrid learning. This case study has shown that in such circumstances, the implementation and quality of a new course hinges largely on the instructor's ability to guide and nurture the learning community. In selecting an ideal hybrid course instructor, characteristics could include previous eLearning experience, technological skills, the ability to use reflective practice to inform course design, delivery, and revision, and a commitment to quality hybrid learning. As an essential ingredient for improving ASE programs, Bynner (2008) advocates for instructors to engage in professional development focused on ASE principles and pedagogy. An instructor's knowledge and skills in both ASE principles and effective eLearning strategies are linked to creating quality hybrid learning. At the same time, instructors need to commit time and energy to planning and delivering a hybrid learning community that enables learners to function and transition between the two learning environments (Hill, 2006). This would create a sense of continuity between the learners understanding a new way of learning and the instructor identifying *how* they are learning in this new way.

An effective instructor also accommodates the needs of the learners within a course. In doing so, an instructor's observations and beliefs can alter the way a course is delivered. In this case study, the instructor's perception of the skills of the mature learners transformed the

intended course to traditional F2F delivery, rather than accommodating hybrid learning environments. For example, the instruction eliminated a large portion of the hybrid course prior to the learners becoming familiar with the eLearning environment, or to experiencing hybrid learning to its full extent. Concurrently, instructors should be prepared for road blocks, and plan strategies to circumvent them. For example, if a learner lacks computer skills, an instructor could implement a cooperative learning activity spanning both F2F and eLearning environments which focuses on the accessing reference guides in both written and electronic formats. An instructor must be committed to trying a new learning modality if data on *how* the learners function within it is to be gathered. The literature suggests many of the early successes with eLearning are linked with the enthusiasm and capability of the individual professor (McLachlan-Smith & Gunn, 2001; Robinson, 2001). Similarly, MacDonald & Thompson (2005) write:

In this case study, there was no faculty eLearning strategy or departmental requirements or incentives to create eLearning courses. The drive to create an online version of EDU5199 was primarily due to the determination of one professor and her ability to marshal the necessary resources and willingness to take a risk by trying something new.
(p.17)

The outcome of this course may be quite different if taught by a different instructor.

Lessons Learned in Hybrid Learning

While there are limitations in generalizing the experiences of a small group of mature learners, some of the findings can inform others designing and implementing hybrid learning (Hill, 2006). The data collected throughout this case study provided information about the design, development, and delivery of a hybrid course at the secondary level. What follows are some of the lessons learned from the present study for both hybrid learning and eLearning. While

these recommendations are specific to this case study, other educators may find the information useful as they consider their own educational context.

First, the structure of the course is central to the hybrid experience. The DDLM (MacDonald et al., 2001) considers structure as the precursor connected to all of the other constructs. In the present study, structure was crucial and in my opinion supported the DDLM's proposition that it should form the basis for all other constructs. Even though the structure was intended to meet the learners' needs, learners were only able to clearly voice their needs as the course approached completion. Therefore structure was the starting point and the course analysis complementary in that it informed the instructor after the fact. It is only when learners experienced hybrid learning that they were able to accurately reflect on how to hone the course to meet their needs. Thus structure must be based on more than the institutional timetable. It must also acknowledge the academic backgrounds of the learners, the past experiences in technology (eLearning and computer skills) for both instructor and learners, and a pedagogical framework. During the first time a course is offered, the learning event must be viewed as a piloting stage and should be combined with one or more evaluation methods to validate the learning experience.

The present study highlighted some issues pertinent to structure, that could help guide the design of other hybrid courses for secondary learners. The constructs of structure within the DDLM include pedagogical strategies and learning environment. Hill (2006) recommends the creation of a robust infrastructure which is kept up-to-date throughout a course. In this case study, neither the learning environment, nor the learning tasks, were established prior to the onset of the course. While the DDLM advocates for continual adaptation and improvement for superior learning outcomes, advanced preparation of tangible learning tasks and the building of the

eLearning environment must be the starting point. With respect to the implementation of eLearning sessions embedded with the hybrid course, instructors should establish hybrid learning routines; it is preferable to do so sooner rather than later. Learners need to be mentored throughout the process so they develop the proficiency with learning in a hybrid modality, while also revealing areas where they may need further instruction. For example, two weeks seemed to be too lengthy a time period for the introductory F2F portion of the course. At the same time, this also facilitates getting the instructor into the hybrid teaching routine, especially in a first attempt. Finally, careful attention should be placed on helping learners self-evaluate throughout the workshop, in order to help them reflect on and develop their own skills.

Second, content needs to be comprehensive and must rely on authentic material. Based on their past educational challenges, mature learners are often disconnected from the academic world (Mansour & Mupinga, 2007). This group of learners likes to see how the content relates to their 'big picture', which includes their immediate needs and their future goals. Activities that connect with post-secondary destinations such as college or workplace programs enable learners to see the relevance of their learning. For example, screen shots of a college or workplace training course would present learners with a context for acquiring eLearning skills; these images could be associated with becoming proficient with their current eLearning environment. Content needs be presented clearly and devoid of technical language, especially in titles or organisation pages to invite learners into the learning environment and accommodate a larger range of learning capabilities (Mansour & Mupinga). Learning tasks should not only focus on academic content, but also on bringing the learners' attention to building their own skills such as independence and time management. For example, initial learning tasks could be broken down

into 10-minute blocks of time to help learners structure their eLearning times within the context of their own lives.

Third, the use of eLearning technology should be varied in course content. Guided by the pedagogical foundations of the course, the instructor should include a wide variety of media (text based, illustrations, video, audio, etc.) since they maintain interest and act as motivators for participation early on in the course. This case study exposed course announcements, online quizzes, and PowerPoint tutorials as those that engage learners. Features such as discussion forums, wikis and blogs would further empower learners, but also reflect contemporary uses of technology outside of the walls of the school (Oblinger and Oblinger, 2005). It is also necessary for the instructor to ensure the functionality of eLearning features such as the discussion forum prior to delivering a session. Frustrations with technology on the part of the learners may be prevented through tests.

Fourth, delivery is a revealing experience for any education program. Learners are able to truly assess whether their needs are being met through course delivery. In this case study, hybrid learning, though not extensively delivered, was generally viewed as a desirable learning approach. Its delivery reveals important issues. The instructor must continuously monitor how the learners interact in both learning environments, and learners must be given voice so they may comment on their learning experience. An instructor presence is important to build community in the eLearning environment, as well as the F2F one (Thompson & MacDonald, 2005). The techniques for facilitating online discussion can influence the learners' feelings of success, and in turn, their participation in the eLearning environment (Olapiriyakul & Scher, 2006). To avoid disconnected learning environments, the instructor should initiate discussions both F2F and online. While online, the instructor should establish posting guidelines, answer questions

promptly, and post unifying comments according to a specified timeline. This can serve to spark a new discussion or fuel continued discussion on the topic of interest. Plans should then be made to revise the course as soon as possible without reverting to F2F learning. At the same time, instructors must be prepared for learners to initially struggle, and subsequently succeed, when given the opportunity to learn independently online. While learners appreciated the flexibility and accessibility of the eLearning environment, many still expressed a desire for F2F contact with their instructor. Willems (2007) stressed the importance of acknowledging the ‘inflexibilities’ in any flexible learning scenario. To this end it is important that we investigate further learners' experiences of hybrid learning.

Strengths

While Kim and Bonk (2006) predicted growth in the area of hybrid learning, Dawley (2008) identifies research on hybrid learning as still emergent and recommends further research contributions to this course modality. One strength of the present study was the opportunity to explore hybrid learning for mature learners. As depicted in Figure 3, there has been no other literature found that connects hybrid learning for this subset of adult learners. Within the present inquiry, learners and instructor alike have commented on the usefulness of the limited experience with hybrid learning to help them understand its practical applications.

The present case encompassed the design, development, delivery, and evaluation of the course rather than just evaluating an existing course for mature learners. Examining the entire process constitutes a strength of this study. The experience provided insight into the process of designing, developing, and delivering a hybrid learning course that wouldn't otherwise have been available. It also put forth the importance of thoroughly planning courses that encompass eLearning. Some of the issues discovered in the present study, such as the learner's proficiency,

were contextual constraints influencing the hybrid course, rather than structural constraints within the course itself. I feel strongly that despite challenges with learner and instructor proficiency in implementing a hybrid learning course, this study provided a realistic glimpse into the lived realities of mature learners who strive to complete their OSSD and the instructors who endeavour to support their journey.

Delimitations

A concurrent strength and limitation of the present study lies in its approach. This study reflects realistic experiences in an actual classroom where learners and instructors were building meaning together. The highs and lows of the course offer powerful insights into the barriers and facilitators for instructors not averse to embarking upon a new course delivery modality. There is no perfect world within which educational change occurs and this case study is reflective of this reality. The presentation of the research setting in detail can help practitioners determine whether the research setting “sufficiently resembles their own situation to warrant adopting the same practices” (Merriam, 2001, p. 222). Readers of the present study may draw inferences from its interpretations and transfer these inferences to inform their own contexts.

That said, it is important to acknowledge that the present study was limited to one case: one course within a medium-sized adult high school in an urban environment. A larger sample of adult high schools would provide richer data to describe the mature learners’ experiences with a hybrid modality. It would also allow for professional collaboration among educators, in order to collectively build effective hybrid learning practices at the secondary level. Furthermore, this course is limited to a defined set of learning expectations. The study could be extended to include more sections of the same course with a different instructor. Different instructors might present course activities with their own style or make different choices in their classroom and

thus influence the learners' experiences. Including a variety of different courses would also provide a broader perspective on the effect of hybrid learning in a range of subject areas. Other courses involve the acquisition and application of different sets of knowledge and skills, offering further opportunity to grasp the complex experiences of hybrid learning.

The reduced extent to which hybrid learning was implemented can inform educators attempting to change their practice of potential pitfalls in their own teaching journeys. Indeed, the instructor's decision to curtail eLearning sessions did limit the data and the learners' experiences; the decision arose out of a need to return to known practice which met learner's needs rather than detracting from their learning through experimenting with a new delivery modality. The decision prevented learners from becoming comfortable in both types of learning environments, thereby limiting the depth and breadth of the data; participants could only offer feedback and reflection on a limited exposure to hybrid learning. While Patton (1990) commented "There are no perfect research designs. There are always trade-offs" (p. 162), the present study was an opportunity to explore a genuine learning experience in a realistic context. Instructors make decisions to advocate for the needs of their learners. Researchers in this type of setting can simply record the outcome of their decisions and the experiences of the learners within their classrooms. In this case, I believe the experience provides valid and realistic data to inform the implementation of hybrid courses within the secondary school system.

Within this research study, the learner participants who elected to give a voice to their experience were largely English-speaking learners, or at least those functioning at an ESL Level of 4 or 5. More specifically, these are the voices of those whose proficiency with English gave them sufficient comfort to participate in the inquiry. The voices of learners less proficient in

English are absent in this inquiry. Their participation may have provided further insight into the barriers and facilitators for mature learners within a hybrid course.

Lastly, this case study highlights the issue of being a researcher and a developer of eLearning courses while observing another person deliver a course and the learners within it. Where do the participants' perceptions end and where do the researcher's begin? In an interpretive study it is difficult to answer that question. While it may be difficult to delineate, I attempted to reflect back the voices of the learners and the perceptions of the instructor from the vantage point of an objective colleague. The version of reality in this case study is seen through my eyes; the data could in all likelihood be interpreted differently from another's perspective.

Implications for Future Research

The field of eLearning is an emerging and crucial area for Canadian innovation and leadership and the Ministry of Education is currently examining its use at the secondary level (NSERC, 2002). Instructors are being encouraged to integrate technology into their teaching, where the integration of BlackBoard and course websites is increasingly becoming a part of the classroom landscapes. Simultaneously, school boards are offering more and more eLearning courses to secondary learners. While the descriptions and findings from this inquiry contribute to the emerging trends of eLearning, they also reveal that alternative ways such as hybrid learning may be more appropriate in meeting the needs of learners. The evaluation of outcomes of hybrid learning at the secondary level is an area that needs to be developed in both eLearning and secondary pedagogical research.

In the conversion of traditional to technology-based learning, it is essential to understand the mechanics and the process of such a conversion (Roper, 2007). Further longitudinal studies that track the changes in learning outcomes that occur as a result of hybrid learning are warranted

(Lin, 2008). These types of studies could provide us with a great understanding about questions such as:

- How can hybrid learning improve the educational experiences of mature learners?
- What kind of supports do mature learners need to transition to a hybrid course?
- Which learning tasks are most suitable to building a quality hybrid course for mature learners?
- What staffing and educational conditions need to be put in place for ASE program changes to occur?

Professional development associated with hybrid learning is not well documented. More research is required to provide educators with favourable practices that will intimately correspond to the learners' needs and ultimately maximize learners' participation (Bynner, 2008). These practices should connect with the design, development, and delivery of hybrid courses.

Within the present study, data predominantly came from the learner's vantage point, although reflections from their instructor were also tapped. This qualitative approach explored emergent views on the appropriateness of hybrid learning for mature learners. There are others who may seek information on tasks and strategies that work so the information can be transferred to other learning contexts. Dawley (2008) recommends research into hybrid learning and its effectiveness for supporting learning to contribute to the literature. By incorporating feedback models, such as those put forth by Hummel (2006), researchers could gather quantitative data to add another dimension to our collective understanding of hybrid learning and its appropriateness for mature learners.

Finally, the body of research informing program delivery in ASE is comparatively as limited as its funding (Ramaley & Zia, 2005). Further studies on learning and effective programs

in the context of ASE could contribute to the theoretical base about learning principles that support mature learners. These studies could focus on how to adapt existing programs and materials to create ASE programs which suit the needs of mature learners. There has been very little done to filter the findings in the broader field of adult learning through the particular needs of mature learners; there is an even greater opportunity to link eLearning and hybrid learning with the needs of mature learners.

A Last Word

In closing, if there is one thing that I have learned throughout these past years it is that technology can be perceived as a facilitator or a barrier of learning. While the present study did not offer substantial opportunities to gather data on the outcomes of hybrid learning, it did present reflective opportunities. Reflection on what constitutes good teaching practice feeds future educational endeavours, while highlighting the importance of hearing the voice of learners during a course in order to strengthen the instructor-learner bond in building quality learning experiences. Hybrid learning continues to be perceived as a distant cousin of eLearning. I am looking forward to finding out how this story will evolve, and I am already grateful to everyone who will contribute to this new understanding.

References

- Akkoyunlu, B., & Yilmaz-Soylu, M. (2008). Development of a scale on learners' views on blended learning and its implementation process. *Internet and Higher Education*, 11, 26-32.
- Anagnostopoulos, D., Basmadjian, K.G., & McCrory, R.S. (2005). The decentered teacher and the construction of social space in the virtual classroom. *Teachers College Record*, 107(8), 1699-1729.
- Aragon, S., Johnson, S., & Shaik, N. (2002). The influence of learning style preferences on student success in online versus face-to-face environments. *American Journal of Distance Education*, 16(4), 227-244.
- Barker, A. (2002). A case study in instructional design for web-based courses. *Nursing Education Perspectives*, 23(4), 183-186.
- Basic Skills Agency. (2007). *Basic skills and employability 2007*. Retrieved March 28, 2008 from <http://archive.basic-skills.co.uk>.
- Becker, H.J. (2001). *How are teachers using computers in instruction?* Paper presented at the 2001 Meetings of the American Educational Research Association. Retrieved October 17, 2003 from <http://www.crito.uci.edu/tlc/FINDINGS/special3/>.
- Becker, H.J., Ravitz, J., & Wong, Y. (1999). *Teacher and teacher-directed use of computers and software* (Report No. 3). Irvine, CA: Center for Research on Information Technology and Organizations (CRITO).
- Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27(2), 139-153.
- Berge, Z. (2000). Components of the online classroom. In R. Weiss, D. Knowlton & B. Speck, (Eds.), *New directions for online teaching and learning: Principles of effective teaching in the online classroom* (pp. 23-28). San Francisco, CA: Jossey-Bass.
- Bogdan, R., & Biklen, S. (1998). *Qualitative research in education*. Needham Heights, MA: Allyn & Bacon.
- Bonk, C. J. (2002). Online training in an online world (executive summary). *USDLA Journal*, 16(3). Retrieved February 20, 2007 from http://www.usdla.org/html/journal/MAR02_Issue/article02.html
- Bonk, C., & Cummings, J. (1998). A dozen recommendations for placing the student at the centre of web-based learning. *Educational Media International*, 35(2), 82- 89.
- Bonk, C., Olson, T.M., Wisher, R.A., & Orvis, K.L. (2002). Learning from focus groups: An examination of blended learning. *Journal of Distance Education*, 17(3), 97-118.

- Bowlby, J.W., & McMullen, K. (2002). *At a crossroads: First results for the 18-20 year old cohort of the youth in transitions survey*. Retrieved May 10, 2005 from <http://www.statcan.ca/cgi-bin/downpub/freepub.cgi?subject=1821#1821>.
- Bradley, G.L., & Goldman, J.D.G. (1996). Educational providers' views of students who return to school. *Journal of Educational Administration*, 34(3), 64-82.
- Bushnik, T. (2003). *Learning, earning and leaving: The relationship between working while in high school and dropping out*. Statistics Canada research paper. Retrieved May 10, 2005 from www.statcan.ca/english/research/81-595-MIE/81-595-MIE2003004.pdf.
- Bushnik, T., Barr-Telford, L., & Bussière, P. (2004). *In and out of high school: First results from the second cycle of the Youth in Transition Survey, 2002*. Ministry of Industry. Retrieved May 10, 2005 from <http://www.statcan.ca/cgi-bin/downpub/freepub.cgi?subject=1821#1821>.
- Bynner, J. (2008). Never too early, never too late. *Adults Learning*, 19(7), 18-20.
- Cantor, J.A. (1992). *Delivering Instruction to Adult Learners*. Toronto, ON: Wall & Emerson.
- Caruso, J.B. (2006). Measuring student experiences with course management systems. *Educause Research Bulletin*, 19, 2-11.
- Casimiro, L. (2005). *Assessment of an E-learning experience designed with the Demand Driven Learning Model (DDLm) to facilitate interprofessional collaborative patient-centred practice (ICPCP)*. Unpublished master's thesis proposal, University of Ottawa, Ottawa, Ontario, Canada.
- Christophel, D. (1990). The relationships among teacher immediacy behaviours, student motivation, and learning. *Communication Education*, 39, 323-340.
- Chuang, H. (1997). High-school youths' dropout and re-enrollment behaviour. *Economics of Education Review*, 16(2), 171-186.
- Clark, R. (1998). Keeping the flame burning: Ottawa-Carleton Adult High School. *OSSTF Update*, 27(6). Retrieved February 14, 2005 from <http://www.osstf.on.ca/www/pub/update/vol27/2no/2noabur.html>.
- Clarke, A. (2002). *Online learning skills*. Leicester, England: National Institute of Adult Continuing Education.
- Cocklin, B. (1991). *Adult re-entry to secondary school: Experiences and implications*. Paper Presented at the Annual Conference of the Australian Association for Research in Education.
- Comings, J., Garner, B., & Smith, C. (Eds). (2002). *Annual Review of Adult Learning and Literacy*. (Vol. 3). San Francisco, CA: Jossey-Bass.

- Conference Board of Canada. (2001). *Employability Skills 2000+*. Retrieved January 20, 2005 from <http://www.conferenceboard.ca/education/learning-tools/pdfs/esp2000.pdf>.
- Consortium for School Networking (CSN). (2004). *Digital divide leadership*. Washington, D.C.: Consortium for School Networking. Retrieved February 17, 2008 from www.cosn.org/resources/grunwald/digital_leadership_divide.pdf.
- Cornelius, S., & Gordon, C. (2008). Providing a flexible, learner-centred programme: Challenges for educators. *Internet and Higher Education*, 11, 33-41.
- Council of Ontario Universities. (2000). *A time to sow: report from the task force on learning technologies*. Retrieved October 25, 2003 from http://www.cou.on.ca/publications/briefs_reports/online_pubs.htm.
- Creswell, J.W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Dawley, L. (2008). *The tools for successful online teaching*. Hershey, PA: Information Science Publishing.
- Dede, C. (1996). The evolution of distance education: Emerging technologies and distributed learning. *The American Journal of Distance Education*, 10(2), 4-36.
- Dennis, J. (2003). Problem-based learning in online vs. face-to-face environments. *Education for Health*, 16(2), 198-209.
- DeVitt, T. (1997). Six reasons to infuse science with technology. *Electronic Learning*, 16(5), 41-46.
- Dewar, T. (1999). *Adult learning online*. Retrieved February 15, 2005 from <http://www.calliopelearning.com/resources/adult.html>.
- Dolezalek, H. (2004). 2004 Industry report. *Training*, 41(10), 20-37.
- Draves, W.A. (2000). *Teaching Online*. River Falls, WI: LERN Books.
- Driscoll, M. (1998). *Web-based training: Using technology to design adult learning experiences*. San Francisco, CA: Jossey-Bass Pfeiffer.
- Duhaney, D.C. (2004). Blended learning in education, training, and development. *Performance Improvement*, 43, 35-38.
- Dupeyrat, C., & Mariné, C. (2005). Implicit theories of intelligence, goal orientation, cognitive engagement, and achievement: A test of Dweck's model with returning to school adults. *Contemporary Educational Psychology*, 30(1), 43-59.
- Edwards, C. (2006). Why getting the right mix can be difficult. *People Management*, 12(8), 15.

- Ekström, E. (2003). Earning effects of adult secondary education in Sweden. *Institute for Labour Market Policy Evaluation, Working Papers 2003*. Retrieved May 10, 2005 from http://www.ifau.se/templates/ListingPublication____4791.aspx.
- El-Tigi, M., & Branch, R.M. (1997). Designing for interaction, learner control, and feedback during web-based learning. *Educational Technology*, 37(3), 23-29.
- Entwisle, D.R., Alexander, K.L., & Olson, L.S. (2004). Temporary as compared to permanent high school dropout. *Social Forces*, 82(3), 1181-1205.
- Flood, J. (2002). Read all about it: online learning facing 80% attrition rates. *The Turkish Online Journal of Distance Education*, 3(2). Retrieved March 20, 2005 from <http://tojde.anadolu.edu.tr/tojde6/articles/jim2.htm>.
- Fox, S., & MacKeogh, K. (2003). Can eLearning promote higher-order learning without tutor overload? *Open Learning*, 18(2), 121-134.
- Frazee, R.V. (2003). Using relevance to facilitate online participation in a hybrid course. *Educause Quarterly*, 4, 67-69.
- Gadbow, N.F. (2002). Teaching all learners as if they were special. *New Directions for Adult and Continuing Education*, 93, 51-61.
- Gadbow, N.F., & Du Bois, D.A. (1998). *Adult learners with special needs: strategies and resources for postsecondary education and workplace training*. Malabar, FL: Krieger.
- Gagné, M., & Deci, E.L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behaviour*, 26, 331-362.
- Gagné, R., Briggs, L., & Wager, W. (1992). *Principles of Instructional Design* (4th ed.). Fort Worth, TX: HBJ College Publishers.
- Garnham, C., & Kaleta, R. (2002). Introduction to hybrid courses. *Teaching with Technology Today*, 8(6). Retrieved March 15, 2005 from <http://www.uwsa.edu/ttt/articles/garnham.htm>.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, 7(2), 95-105.
- Gay, L.R., & Airasian, P. (1992). *Educational research: Competencies for analysis and applications*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Goldberg, H.R., Haase, E., Shouka, A., & Schramm, L. (2006). Redefining classroom instruction. *Advances in Physiology Education*, 30, 124-127.
- Goldberg, M.W., Salari, S., & Swoboda, P. (1996). World wide web-course tool: An environment for building www-based courses. *Computer Networks and ISDN Systems*, 28(7-11), 1219-1231.

- Grabe, M., & Grabe, C. (2004). *Integrating technology for meaningful learning*. New York, NY: Houghton Mifflin.
- Gruber, T. (1993). Towards principles for the design of ontologies used for knowledge sharing. *International Journal Human-Computer Studies*, 43, 907-928.
- Harker, M., & Koutsantoni, D. (2005). Can it be as effective? Distance versus blended learning in a web-based EAP programme. *ReCALL*, 17(2), 197-216.
- Hartman, J., Moskal, P., & Dziuban, C. (2005). Preparing the academy today for the learner of tomorrow. In D.G. Oblinger & J.L. Oblinger, *Educating the Net Generation* (pp. 6.1-6.15). Retrieved August 8, 2007 from www.educause.edu/educatingthenetgen/.
- Hartman, V.F. (1995). Teaching and learning style preferences: Transitions through technology. *VCCA Journal*, 9(2), 18-20. Retrieved February 15, 2005 from <http://www.vccaedu.org/inquiry/vcca-journal/hart1.htm>.
- High-School Reform Committee. (2004). *16 reasons to explore alternate, hybrid schedules*. Chapel Hill, NC: Chapel Hill-Carrboro City Schools. Retrieved April 7, 2005 from <http://www.chccs.k12.nc.us/HighSchoolReform/index1.asp>.
- Ho, C. P., & Burniske, R. W. (2005). The evolution of a hybrid classroom: Introducing online learning to educators in American Samoa. *TechTrends: Linking Research & Practice to Improve Learning*, 49, 24-29.
- Hoadley, C., & Linn, M. (2000). Teaching science through online, peer discussions: SpeakEasy in the knowledge integration environment. *International Journal of Science Education*, 22(8), 839-857.
- Holton, E. F., Coco, M.L., Lowe, J.L., & Dutsch, J.V. (2006). Blended delivery strategies for competency-based training. *Advances in Developing Human Resources*, 8(2), 210-228.
- Hysong, S.J., & Mannix, L.M. (2003). *Learning outcomes in distance education versus traditional and mixed environments*. Presented at the 18th Annual Conference of the Society for Industrial and Organizational Psychology. Orlando, FL: Society for Industrial and Organizational Psychology.
- Jafari, A., McGee, P., & Carmean, C. (2005). Managing courses what faculty, students, and administrators want defining learning. *Educause Review*, 50(4), 50-70.
- Jahnukainen, M. (2001). Two models for preventing students with special needs from dropping out of education in Finland. *European Journal of Special Needs Education*, 16(3), 245-258.
- James, C-L. (2000). *Assessment testing as a predictor of student success in adult basic education mathematics courses*. Master's Thesis, University of Victoria, Victoria, British Columbia, Canada. Retrieved February 10, 2005 from <http://www.collectionscanada.ca/>.

- Johnson, C.M. (2001). A survey of current research on online communities of practice. *Internet and Higher Education*, 4(1), 45-60.
- Johnson, S.D., & Aragon, S.R. (2003). An instructional framework for online learning environments. *New Directions for Adult and Continuing Education*, 100(57), 31-43.
- Kaplan, S. (2002). Building communities: Strategies for collaborative learning. *Learning Circuits*, 8. Alexandria, VA: American Society for Training & Development. Retrieved March 30, 2008 from <http://www.learningcircuits.org/2002/aug2002/kaplan.html>.
- Kassop, M. (2003). Ten ways online education matches, or surpasses, face-to-face learning. *The Technology Source*, 3. Retrieved July 10, 2004 from <http://ts.mivu.org/default.asp?show=article&id=1059>.
- Keller, J.M. (1987). The systematic process of motivational design. *Performance & Instruction*, 26(9), 1-8.
- Khan, A., & Lindquist, K. (2002). Blended learning at a leading education institute: State of practice. *elearn 2002*.
- Kidwell, P.K., Freeman, R., Smith, C., & Zarcone, J. (2004). Integrating online instruction with active mentoring to support professionals in applied settings. *Internet and Higher Education*, 7(2), 141-150.
- Kim, K.-J., & Bonk, C.J. (2006). The future of online teaching and learning in higher education: The survey says... *Educause Quarterly*, 4, 22-30.
- King, F.B. (2002). A virtual student: Not an ordinary Joe. *Internet and Higher Education*, 5(2), 157-166.
- Klein, H.J., Nöe, R.A., & Wang, C. (2006). Motivation to learn and course outcomes: The impact of delivery mode, learning goal orientation, and perceived barriers and enablers. *Personnel Psychology*, 59, 665-702.
- Knowles, M.S. & Associates. (1984). *Andragogy in Action: Applying Modern Principles of Adult Learning*. San Francisco, CA: Jossey-Bass.
- Knowles, M.S. (1970). *The modern practice of adult education: Andragogy vs. pedagogy*. New York, NY: Association Press.
- Knowles, M.S. (1975). *Self-directed learning*. New York, NY: Association Press.
- Knowles, M.S. (1990). *The adult learner* (4th ed). Houston, TX: Gulf.
- Knowles, M.S., Holton, E.F., & Swanson, R.A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Woburn, MA: Butterworth-Heinemann.

- Langan, T. (1997). Online education: a student's perspective. *Campus-Wide Information Systems*, 14(4), 128-132.
- Lanham, E., & Zhou, W. (2003). Cultural issues in online learning—Is blended learning a possible solution? *International Journal of Computer Processing of Oriental Languages*, 16(4), 275-293.
- Leadership Project. (1995). *Adult learning principles & practice*. Toronto, ON: Sheridan College.
- Levin, S., Waddoups, G., Levin, J., & Buell, J. (2001). Highly interactive and effective online learning environments for teacher professional development. *International Journal of Educational Technology*, 2(2). Retrieved March 20, 2004 from <http://smi.curtin.edu.au/ijet/v2n2/slevin/>.
- Lin, Q. (2008). Student satisfactions in four mixed courses in elementary teacher education program. *Internet and Higher Education*, 11, 53-59.
- Lincoln, Y.S., & Guba, E. (1985). Establishing trustworthiness. In Y.S. Lincoln & E. Guba, *Naturalistic Inquiry* (pp. 289-331). Beverly Hills, CA: Sage.
- Lincoln, Y.S., & Guba, E.G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 163-188). Thousand Oaks, CA: Sage Publications.
- Lowe, J.S., & Holton, E.F. (2005). A theory of effective computer-based instruction for adults. *Human Resource Development Review*, 4(2), 159-188.
- Lujan, H.L., & DiCarlo, S.E. (2006). Too much teaching, not enough learning: what is the solution? *Advances in Physiology Education*, 30, 17-22.
- Lunenberg, M.L., & Volman, M. (1999). Active learning: views and actions of students and teachers in basic education. *Teaching and Teacher Education*, 15(4), 431-445.
- MacDonald, C., Stodel, E., Farres, L. G., Breithaupt, K., & Gabriel, M. A. (2001). The demand-driven learning model: A framework for web-based learning. *Internet and Higher Education*, 4, 9-30.
- MacDonald, C.J., & Thompson, T.L. (2005). Structure, content, delivery, service, and outcomes: Quality e-Learning in higher education. *International Review of Research in Open and Distance Learning*, 6(2).
- MacDonald, C.J., Breithaupt, K., Stodel, E.J., Farres, L.G., & Gabriel, M.A. (2002). Evaluation of web-based educational programs: A pilot study of the Demand-Driven Learning Model. *International Journal of Testing*, 2(1), 35-61.
- Mansour, B. E., & Mupinga, D. M. (2007). Students' positive and negative experiences in hybrid and online classes. *College Student Journal*, 41, 242-248.

- Marshall, C., & Rossman, G.B. (1999). *Designing qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Martins, L.L., & Kellermanns, F.W. (2004). A model of business students' acceptance of a web-based course management system. *Academy of Management and Learning*, 3, 7-26.
- McCray, G.E. (2000). The hybrid course: merging on-line instruction and the traditional classroom. *Information Technology and Management*, 1, 307-327.
- McLachlan-Smith, C., & Gunn, C. (2001). Promoting innovation and change in a 'traditional' university setting. In F. Lockwood, and A. Gooley (Eds.), *Innovation in open and distance learning: Successful development of online and web-based learning* (pp. 38-50). London, UK: Kogan Page.
- Merriam, S.B. (2001). *Qualitative research and case study applications in education* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Miles, M.B., & Huberman, A.M. (2002). *The qualitative researcher's companion: Classic and contemporary readings*. Thousand Oaks, CA: Sage.
- Milne, A.J. (2006). Designing Blended Learning Space to the Student Experience. In D. Oblinger and J. Oblinger (eds.), *Educating the net generation* (pp. 11.1-11.15). Retrieved August 8, 2007 from www.educause.edu/educatingthenetgen/.
- Ministry of Education. (1987). *Continuing Education: A resource document*. Retrieved February 25, 2005 from <http://www.edu.gov.on.ca/eng/document/resource/contin.html>.
- Ministry of Education. (1998). *Adult literacy in Ontario: the international adult literacy survey results*. Retrieved February 7, 2005 from <http://www.edu.gov.on.ca/eng/training/literacy/international/internat.pdf>.
- Ministry of Education. (1999a). *Ontario secondary schools, grades 9 to 12*. Toronto, ON: Queen's Printer for Ontario.
- Ministry of Education. (1999b). *The Ontario curriculum, grades 9 and 10: Business studies*. Toronto, ON: Queen's Printer for Ontario.
- Ministry of Education. (2004). *Adult education review: A discussion paper*. Retrieved February 7, 2005 from <http://www.edu.gov.on.ca/adultedreview/paper.html>.
- Ministry of Education. (2005). *Frequently asked questions*. Retrieved March 30, 2005 from <http://www.edu.gov.on.ca/eng/question/qs.html>.
- Ministry of Education. (2006). *The Ontario curriculum, grades 9 and 10: Revised*. Toronto, ON: Queen's Printer for Ontario.
- Ministry of Education. (2007a). *Class size tracker*. Retrieved July 17, 2007 from <http://www.edu.gov.on.ca/eng/cst/index.html>.

- Ministry of Education. (2007b). *6 ways: Reach every student*. Retrieved July 17, 2007 from <http://www.edu.gov.on.ca/eng/6ways/welcome.html>.
- Mitchell, M., Johnston, L., & Keppell, M. (2004). Preparing children and their families for hospitalisation. A review of the literature. *Neonatal, Paediatric & Child Health Nursing*, 7(2), 5-15.
- Mombourquette, F., McEwan, R., & McBride, A. (1999). Narrowing opportunities for adults in Ontario secondary schools: A study of students affected by the changes to provincial funding of adults and the Education Act 1996. *NALL Working Paper #09 – 1999*. Retrieved May 10, 2005 from <http://www.oise.utoronto.ca/depts/sese/csew/nall/res/09narrowing.htm>.
- Movement for Canadian Literacy (MCL). (2003). *Adult learners, what do you think?* Survey results: House of Commons Standing Committee on Human Resources Development and the Status of Persons With Disabilities. Retrieved May 5, 2005 from <http://www.literacy.ca/govrel/submit/cover.htm>
- Neo, M. (2005). Web-enhanced learning: engaging students in constructivist learning. *Campus-Wide Information Systems*, 22(1), 4-14.
- Neumeier, P. (2005). A closer look at blended learning – parameters for designing a blended learning environment for language teaching and learning. *ReCALL*, 17(2), 163-178.
- Nisar, T. M. (2004). E-learning in public organizations. *Public Personnel Management*, 33(1), 79-88.
- Nöe, R.A. (2005). *Employee training and development* (3rd ed.). Burr Ridge, IL: Irwin McGraw-Hill.
- Normand, C., & Littlejohn, A. (2006). *Flexible delivery: A model for analysis and implementation of flexible programme delivery*. Gloucester, UK: Quality Assurance Agency for Higher Education.
- NSERC. (2002). Expanding the national research base: Report on the task force on virtual universities and online learning. Retrieved October 23, 2003 from <http://www.nserc.ca/>.
- Ntiri, D.W., Schindler, R.A., & Henry, S. (2004). Enhancing adult learning through interdisciplinary studies. *New Directions for Adult and Continuing Education*, 103, 41-50.
- Oblinger, D., & Oblinger, J. (2005). Is it age or IT: First steps toward understanding the net generation. In D. Oblinger and J. Oblinger (eds.), *Educating the net generation* (pp. 2.1-2.20). Retrieved August 8, 2007 from www.educause.edu/educatingthenetgen/.
- Olapiriyakul, K., & Scher, J.M. (2006). A guide to establishing hybrid learning courses: Employing information technology to create a new learning experience, and a case study. *Internet and Higher Education*, 9, 287-301.

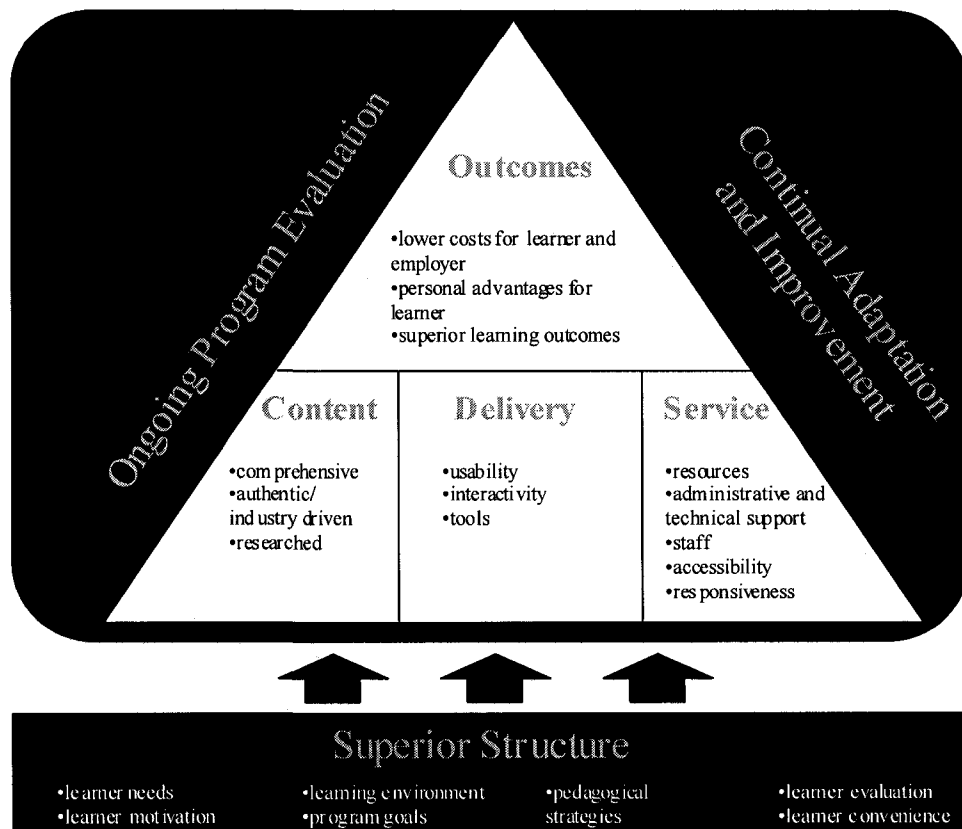
- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *The Quarterly Review of Distance Education*, 4(3), 227-233.
- OSSTF. (2004). Adult Education. *Education Watch*, 1. Retrieved February 10, 2005 from <http://www.osstf.on.ca/www/issues/eduwatch/issue1.pdf>.
- Packham, G., Jones, P., Miller, C., & Thomas, B. (2004). E-learning and retention: Key factors influencing student withdrawal. *Education + Training*, 46(6/7), 335-342.
- Pailing, M. (2002). E-learning: Is it really the best thing since sliced bread? *Industrial and Commercial Training*, 34(4), 151-155.
- Palloff, R., & Pratt, K. (1999). *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco, CA: Jossey-Bass.
- Palloff, R.M., & Pratt, K. (2005). *Learning online: A collaborative approach*. Presented at the 18th Annual Conference on Distance Learning and Teaching. Madison, WI: University of Wisconsin. Retrieved August 8, 2007 from www.uwex.edu/disted/conference.
- Passerini, K., & Granger, M.J. (2000). A developmental model for distance learning using the Internet. *Computers & Education*, 34, 1-15.
- Patterson, M., & Mellard, D. (2007). Characteristics of adult education programs that predict improved learner outcomes. *Adult Basic Education and Literacy Journal*, 1(2), 83-92.
- Patterson, M.B. (2008). Learning disability prevalence and adult education program characteristics. *Learning Disabilities Research & Practice*, 23(1), 50-59.
- Patton, M.Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage Publications.
- Radia, P., & Stapleton, P. (2008). Unconventional Internet genres and their impact on second language undergraduate students' writing process. *Internet and Higher Education*, 11, 9-17.
- Ramaley, J., & Zia, L. (2006). The real versus the possible: Closing the gaps in engagement and learning. In D. Oblinger and J. Oblinger (eds.), *Educating the net generation* (pp. 8.1-8.21). Retrieved August 8, 2007 from www.educause.edu/educatingthenetgen/.
- Roberson, T., & Klotz, J. (2002). How can instructors and administrators fill the missing link in online instruction? *Online Journal of Distance Learning Administration*, 5(4). Retrieved February 12, 2005 from <http://www.westga.edu/~distance/ojdla/winter54/roberson54.htm>.
- Roblyer, M.D., & Schwier, R.A. (2003). *Integrating Educational Technology into Teaching* (Canadian Ed.). Toronto, ON: Pearson.

- Rochester Institute of Technology (RIT). (2005). RIT's approach to blended learning. *Distance Education Report*, 9(5), 4-7.
- Roper, A.R. (2007). How students develop online learning skills. *Educause Quarterly*, 1, 62-65.
- Rovai, A. P., & Jordan, H.M. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distance Learning*, 8. Retrieved April 8, 2008 from <http://www.irrodl.org/content/V.S.2rovai-jordan.html>.
- Rovai, A.P. (2003). In search of higher persistence rates in distance education online programs. *Internet and Higher Education*, 6, 1-16.
- Rumberger, R.W., & Lamb, S.P. (2003). The early employment and further education experiences of high school dropouts: a comparative study of the United States and Australia. *Economics of Education Review*, 22(4), 353-366.
- Schacter, J. (1999). *The impact of educational technology on student achievement: What the most current research has to say*. Paper presented at Milken Exchange on Education Technology, Santa Monica, CA. Retrieved October 15, 2003, from <http://www.mff.org/pubs/ME161.pdf>.
- Schrum, L., & Hong, S. (2002). From the field: Characteristics of successful tertiary online students and strategies of experienced online educators. *Education and Information Technologies*, 7(1), 5-16.
- Sexton, T. L. (1997). Constructivist thinking within the history of ideas: The challenge of a new paradigm. In T. L. Sexton & B. L. Griffin (Eds.), *Constructivist thinking in counseling practice, research, and training* (pp. 3-18). New York: Teachers College Press.
- Severiens, S., ten Dam, G., & Nijenhuis, E. (1998). Ways of knowing and patterns of reasoning: women and men in adult secondary education. *Gender and Education*, 10(3), 327-342.
- Shank, P. (2004). Competencies for online instructors. *Learning Peaks*. Retrieved August 8, 2007 from www.learningpeaks.com.
- Sitzmann, T.M., Kraiger, K., Stewart, D.W., & Wisher, R.A. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology*, 59, 632-664.
- Skill, T.D., & Young, B.A. (2002). Embracing the hybrid model: working at the intersections of virtual and physical learning spaces. *New Directions for Teaching and Learning*, 92, 23-32.
- Sparrow, S. (2004). Blended is better. *Training and Development*, 58(11), 52-55.
- Stake, R.E. (2000). Case studies. In N.K. Densin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 435-454). Thousand Oaks, CA: Sage.

- Statistics Canada. (1995). *School leavers survey*. Retrieved February 14, 2005 from <http://www.statcan.ca/english/Dli/Data/Ftp/sls.htm>.
- Statistics Canada. (2000). *Youth in transitions survey: Project overview*. Retrieved May 10, 2005 from <http://www.pisa.gc.ca/t-00-5e.pdf>.
- Statistics Canada. (2001a). *Dropping out of high school: Definitions and costs*. Retrieved May 10, 2005 from <http://www11.hrsdc.gc.ca/en/cs/sp/hrsdcrarb/publications/research/2000-000063/page00.shtml>.
- Statistics Canada. (2001b). *2001 Census of Population*. Retrieved February 14, 2005 from <http://www.statcan.ca/english/Pgdb/popula.htm>.
- Statistics Canada. (2003). *Literacy, economy and society: Results of the first international adult literacy survey*. Retrieved July 17, 2007 from <http://www.statcan.ca/bsolc/english/bsolc?catno=89-545-X>.
- Stodel, E.J., & Farres, L.G. (2002). Insights for delivering mental skills training over the web. *Journal of Excellence*, 6, 104-117.
- Stodel, E.J., Farres, L.G., & MacDonald, C.J. (2005). Online mental training using web excellence. In C. Howard et al. (Eds.), *Encyclopedia of Distance Learning and Technology*. Hershey, PA: Idea Group.
- Stodel, E.J., Thompson, T.L., & MacDonald, C.J. (2006). Learners' perspectives on what is missing from online learning: Interpretations through the community of inquiry framework. *International Review of Research in Open and Distance Learning*, 7(3), 1-24.
- Tennessee Board of Regents (TBR). (2004). *2050- 2010 Strategic Plan*. Retrieved March 30 , 2005 from http://www.tbr.state.tn.us/academic_affairs/stratplan/surveys/.
- Thompson, T.L. & MacDonald, C. (2005). Community building, emergent design and expecting the unexpected: Creating a quality eLearning experience. *Internet and Higher Education*, 8, 233-249.
- Tillman, L.C. (2003). Mentoring, reflection, and reciprocal journaling. *Theory Into Practice*, 42(3), 226-233.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125.
- Tinto, V. (1998). Colleges as communities: Taking research on student persistence seriously. *Review of Higher Education*, 21(2), 167-177.
- Tough, A. (2002). The iceberg of informal adult learning. *NALL Working Paper #49*. Retrieved February 15, 2005 from www.oise.utoronto.ca/depts/sese/csew/nall/res/49AllenTough.pdf.

- Trasler, J. (2002). Effective learning depends on the blend. *Industrial and Commercial Training*, 34(5), 191-193.
- Twigg, C. A. (2003). Improving learning and reducing costs: New models for online learning. *Educause Review*, 38, 28-38.
- Wallace, R.M. (2002). The Internet as a site for changing practice: The case of Ms. Owens. *Research in Science Education*, 32(4), 465-487.
- Waters, T., & Grubb, S. (2004). *Leading schools: Distinguishing the essential from the important*. Aurora, CO: McREL.
- Willems, J. (2007). Flexible learning: Implications of “when-ever,” “where-ever” and “what-ever”. *Distance Education*, 26(3), 429-435.
- Willett, H.G. (2002). Not one or the other but both: Hybrid course delivery using WebCT. *The Electronic Library*, 20(5), 413-419.
- Wolcott, H.F. (1990). *Writing up qualitative research*. Newbury Park, CA: Sage Publications.
- Yin, R.K. (2003). *Case study research. Design and methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Yoon, S-w. (2003). In search of meaningful online learning experiences. *New Directions for Adult and Continuing Education*, 100, 19-30.

DDLM



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Gagné’s Events of Instruction	Keller’s ARCS Model
Gain attention - curiosity motivates the learner Inform learners of objectives - present observable and measurable objectives Stimulate recall of prior learning - association of new info with prior information helps improve the learning process and incorporates constructivism	Attention
Present the content or stimulus material new content that is chunked and organized meaningfully is presented, explained and then demonstrated	
Provide learner guidance help learners encode information for long-term storage	
Elicit performance (practice) the learner must practice the new skill or behaviour	Confidence
Provide feedback provide specific and immediate feedback of learner’s performance	
Assess performance upon completion of unit, learners should be given the opportunity to take post-test or final assessment without any coaching	Satisfaction
Enhance retention and transfer effective educational / training programs have a “performance” focus that facilitate retention and transfer	

Information Management

Overall Expectations

By the end of this course, students will:

- demonstrate an understanding of the information technology terms used in business;
- explain the key infrastructures relevant to information technology;
- manage an information technology work environment;
- electronically manage personal data and computer files.

Specific Expectations

Terminology

By the end of this course, students will:

- define key information technology terms (e.g., Internet, Intranet, Extranet, infrastructure, syntax, work environment);
- explain the concept of information technology;
- use current information technology terminology appropriately.

Infrastructures

By the end of this course, students will:

- explain the functions of the hardware components of a computer workstation;
- explain how a variety of operating systems work;
- explain the use of a variety of peripheral devices (e.g., printers, scanners, video and digital cameras);
- differentiate between stand-alone and networked environments;
- describe the environments to which stand-alone systems and networks are best suited (e.g., home office, school, multinational company).

Work Environment

By the end of this course, students will:

- demonstrate understanding of the importance of managing an ergonomically correct work environment;

- explain information technology health and safety issues (e.g., musculoskeletal injuries, eye strain, radiation from monitors);
- explain the importance of keeping information secure and confidential;
- describe the importance of security systems (e.g., passwords, encryption, log-in) in stand-alone, LAN, and WAN environments;
- demonstrate appropriate interpersonal skills when interacting with colleagues and peers in an information technology work environment (e.g., keeping passwords confidential, respecting privacy of information).

File Management

By the end of this course, students will:

- describe the desktop elements and functions of a computer environment (e.g., icons, menus, toolbars, folders);
- demonstrate an ability to arrange personal folders and files in a logical and useful manner that is easily understood by others;
- create (e.g., design, edit, manage) an electronic address book;
- analyse the potential impact of computer viruses on computer systems and files;
- explain how anti-virus software applications in a business environment enhance system security.

Software Applications

Overall Expectations

By the end of this course, students will:

- demonstrate the skills required to enter data by using appropriate keyboarding techniques;
- demonstrate the use of basic functions and features of common business software;
- produce documents that meet basic business standards and formats.

Specific Expectations

Data Entry Skills

By the end of this course, students will:

- demonstrate the ability to input data effectively;
- demonstrate an understanding of the importance of accuracy when entering data (e.g., consider challenges facing voice recognition);
- use correct keyboarding techniques (e.g., proper posture, correct fingering, proper wrist position).

Application Software

By the end of this course, students will:

- explain the use of common business software (e.g., word processing, database, spreadsheet, graphic, desktop publishing, web page software);
- use the common business software basic functions (e.g., create, save, update, print) and features (e.g., edit tools, fonts, justification, format tools, columns, menus, design and graphic tools, formulas, hyperlinks);
- follow written and oral instructions regarding the use of software applications (e.g., help menus, wizards, manuals).

Business Documents

By the end of this course, students will:

- demonstrate an ability to select the most appropriate software applications for creating a particular business document (e.g., report requiring a word processor, spreadsheet, graphic tool);
- produce correctly formatted business documents (e.g., business correspondence, reports, advertisements, fax cover pages) from printed, handwritten, and revised copies;
- use electronic references effectively (e.g., dictionaries, thesauri, grammar checks, spell checkers).

Electronic Communication

Overall Expectations

By the end of this course, students will:

- demonstrate an ability to use electronic software to create presentations;
- use electronic tools to communicate effectively with others;
- demonstrate an understanding of the legal issues relating to electronic communication.

Specific Expectations

Electronic Presentation

By the end of this course, students will:

- describe the basic functions of the presentation software commonly used in business (e.g., text objects, quick art, chart/graphic tools, slide editor/sorter/lists);
- explain the purposes of presentation tools;
- select the presentation tools that are most appropriate for an assigned purpose and target audience (e.g., slides, animation, music);
- create an electronic presentation (e.g., kiosk display, assembly presentation, class project).

Electronic Communication Tools

By the end of this course, students will:

- describe the tools used to communicate electronically in business (e.g., fax, e-mail, voice mail, bulletin board, discussion group, the Internet, Intranet, Extranet);
- compare a variety of electronic communication tools in terms of their uses and benefits to business;
- explain how e-mail is transmitted through the Internet and Intranet;
- demonstrate an ability to use electronic communication tools (e.g., e-mail, voice mail, the Internet, Intranet, voice recognition) effectively, using acceptable syntax and terminology.

Legal Issues

By the end of this course, students will:

- describe ways in which recent changes in information technology have had a positive and/or negative impact on business, working conditions, and other aspects of people's lives (e.g., access to information, to global trade, to employment; increase in violence, racial issues, harassment, unemployment);
- communicate with people in other cultures, and demonstrate an understanding of their communication customs (e.g., social interactions, political sensitivities, jargon);
- apply acceptable communication protocol in internal and external electronic communication;
- investigate and describe legal issues related to electronic communication;
- describe major issues related to security on the Internet, Intranet, and Extranet, and in e-mail (e.g., privacy, credit card use, use of firewalls).

Electronic Research and Ethical Issues

Overall Expectations

By the end of this course, students will:

- use a variety of electronic media to find relevant information;
- analyse the various uses of the Internet in a business environment;
- analyse the ethical issues concerning the use of electronic information.

Specific Expectations

Electronic Research

By the end of this course, students will:

- identify the forms and applications of electronic media that can be used to gather information (e.g., CD-ROMs, the Internet, search engines);
- describe the function of search engines;
- use a variety of search engines to locate websites;
- access a variety of electronic media (e.g., websites, newsgroups, reference CD-ROMs) to gather information for specific purposes;
- demonstrate an understanding of the criteria required to evaluate electronic media for usefulness, validity, bias, and confidentiality.

The Internet in Business

By the end of this course, students will:

- explain how a stand-alone computer is connected to the Internet;
- compare the services provided to businesses by a variety of Internet Service Providers;
- explain the ways in which organizations can use the Internet and Intranet;
- compare the ways the Internet and Intranet are used in a variety of organizations.

Ethical Issues

By the end of this course, students will:

- explain the purpose and content of an Internet acceptable use agreement;
- determine criteria to evaluate websites in terms of validity, bias, and usefulness;
- analyse the ethical implications of posting, accessing, and transmitting information in various digital formats (e.g., the Internet, bulletin boards, fax);
- apply copyright rules, regulations, and conventions to reference material obtained from electronic sources.

Career Opportunities

Overall Expectations

By the end of this course, students will:

- describe career opportunities related to information technology;
- assess their information technology skills and competencies;
- demonstrate an understanding of information technology programs designed for use in secondary schools.

Specific Expectations

Career Opportunities

By the end of this course, students will:

- identify occupations that require an understanding of information technology;
- explain the skills and competencies needed to work in an information technology environment;
- identify local employers that may require employees who have a knowledge of information technology;
- summarize current job advertisements that require information technology skills and education.

Skills and Competencies Assessment

By the end of this course, students will:

- determine their own information technology skills;
- analyse their information technology strengths and weaknesses;
- summarize, electronically, their information technology skills and competencies;
- demonstrate their information technology skills in samples of their work;
- demonstrate understanding of the importance of doing exemplary work and keeping samples of it for inclusion in résumés and portfolios that can be used in a future job search.

Information Technology Programs in Secondary School

By the end of this course, students will:

- identify the information technology programs available at their school;
- determine the prerequisites for specific information technology courses;
- design a personal plan to help them achieve information technology skills and competencies.

Date	Tasks and Activities
April 2005-January 2006	Development of the hybrid learning BTT2O course
July-September 2005	Ethics approval process
January - June 2006	Delivery and evaluation of the BTT2O hybrid course
January 20, 2006	Registration: recruitment letter and eLearning test distributed
January 31, 2006	First day of class for BTT2O
February 13, 2006	Meet with all individuals who showed an interest in participating in the inquiry Consent Forms collected Classroom observation
February 15, 2006	Classroom observation (introduction of BlackBoard) Demographic survey completed
February 17, 2006	Pre-course instructor interview
February 23, 2006	Classroom observation of BlackBoard discussion activity
March 3, 2006	First eLearning session conducted
March 9, 2006	Pre-course survey and classroom observation
March 23, 2006	Onset of data analysis
March 13-17, 2006 April 3 – 21, 2006	Online observations (journal)
April 14, 2006	Formative Temperature Check 1
	Post-inquiry data collection (surveys, discussion group)
May 18, 2006	Post-course survey
May 25, 2006	Discussion groups
May 27, 2006	Onset of interview transcription and data analysis
June 6, 2006	Instructor interview
June 7, 2006	Continued interview transcription and data analysis
January-June 2006	Coding and analysis of data
July 2006 – May 2008	Writing of findings

Topic	F2F	Online	Implemented
1	Introduction to Blackboard ○ Access to BlackBoard: Login procedures (usernames, passwords) ○ BlackBoard environment (tools, announcements, calendar) Course environment ○ Accessing a specific course ○ Course homepage features ○ Accessing course documents	• Login to BlackBoard and locate course	February 17, 2006 (Week 3)
2	Communication tools ○ sending and receiving emails ○ reading and posting messages	• Check course announcements • Download a course file on introduction to computers to read	March 3, 2006 (Week 5)
3	Assessment tools ○ Submitting files electronically using assignment tool	• Post an introduction about themselves in a discussion forum and responding to postings	Partially March 3, 2006 (Week 5)
4	Assessment tools ○ taking an online quiz	• Submit a file from classroom activity using assignment tool	March 9, 2006 (Week 6)
5	Course materials ○ eLearning activity: instruction provided electronically with instructor facilitating in the classroom	• Read a course file and conduct an online quiz to check for understanding	March 19, 2006 (Week 8)
6	ELearning Strategies ○ review supports available ○ community of learners	• Conduct a webquest on careers in technology • Post strategies and tips in discussion forums	Not completed

Materials provided at registration table and during first week of classes

Dear BTT2O Student:

You are invited to participate in educational research to be conducted in the 2006 winter semester. The inquiry will examine how a hybrid delivery course affects the learning experiences of adult learners such as yourself. A hybrid course is one where classes are held both in a classroom and on the computer. This research is being conducted by Heather Mace, a graduate student in the Faculty of Education at the University of Ottawa working on her Master's of Arts (MA) thesis; she is also a teacher in a school board. If you are interested in participating or finding out more information, please respond to her via email by Friday, February 17.

The topic of this thesis has been selected because of the rise in online learning in course offerings, the pressure on educators to integrate online materials into their teaching, and the desire to improve learning experiences for adult learners. Online materials are those accessed through online course software called BlackBoard. Participation in the study means that you would not attend class in person every day; on some days you would have the flexibility to finish your work through the Internet from home or elsewhere. While a computer and Internet access are necessary to participate in this study, you do not need your own computer or Internet access at home. The school's computer labs will be available to you.

This inquiry will take place within the context of the BTT2O hybrid course in the winter semester, 2006. Your participation or non-participation in this project will have no bearing whatsoever on the evaluation of your performance in the course. Please note: you may enroll in the hybrid section without participating in the research inquiry. The course content for those participating in the hybrid model and those in the classroom will be identical. If you agree to participate in the research, you will complete your course work during scheduled classes and online. In addition, you will be asked to complete three short surveys, two before and one after the course, two short progress reports during the course, and potentially attend an hour-long discussion group during the week of May 22-26, 2006. Beyond these three requirements, there is no additional work required. Your insights as a learner are useful, as there is much to learn from the learners actively in hybrid courses.

The surveys will ask you to fill in information about yourself and your use of the online materials within course activities. They will take approximately 15 minutes each to complete. The discussion group will be approximately an hour in length and discussions will center on the information that was provided in the surveys. The session will be audio-taped and transcribed by me. Any information provided in the surveys or interviews will be confidential. Summaries of the interviews and the surveys will be provided for you to check, and you may withdraw from the research inquiry at any point without penalty.

To help in your decision making process, the **eLearning test** guides you to examine your skills in relation to hybrid and online learning. If you are interested in participating in this study, please obtain a consent form from your teacher and return it by February 16. If you would like more about this research and your potential involvement, please email () or call Heather at (). Thank you for your time in considering this request.

Is eLearning for you?

Thank you for your interest in the hybrid learning project. This project will require you to complete your BTT20 course work both in class and online. eLearning can be a rewarding and flexible experience, yet challenging and frustrating at the same time. Some learners find it easy to learn online and excel in this medium, whereas others find this mode of learning difficult. Fortunately, the hybrid course offers a balance between contact time with your teacher and the virtual classroom.

Below are a series of questions that may help you make a decision to participate in this project or not. Don't worry – some of the technical skills required will be reviewed during the orientation session, while others will be acquired during course activities. And your teacher will only be an email away.

Name: _____

Your profile

1. What is your age?
☐ 18-24 ☐ 25-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60 or older?
2. What is your first language?
☐ English ☐ French ☐ Other (please specify) _____
3. How many courses are you taking this semester? _____.
4. Do you have any special learning needs? If yes, please describe below.
☐ Yes ☐ No

My special learning needs are:

Your computer experience

5. Have you ever taken an online course before? ☐ Yes ☐ No
6. Do you have a computer at home? ☐ Yes ☐ No
7. What type of Internet access do you have at home?
☐ None ☐ High-speed ☐ Dial-up
8. In terms of your comfort with using computers, how do you rate yourself:
 - ☐ Beginner - *I have very little experience*
 - ☐ Novice – *I use the computer occasionally for email, chatting, word processing, games, searching the web, etc... but I often need help to do so*
 - ☐ Intermediate - *I use a computer regularly for email, chatting, word processing, or, searching the web but I sometimes need help to do so*
 - ☐ Experienced - *I use the computer every day and with a variety of applications (e.g., email, chatting, word processing, games, and searching the web, ...)*
 - ☐ Super User - *I use a variety of applications, I can install programs, solve computer-related problems and I could help others.*
9. Give examples to highlight your past use of computers.

Personal Attributes						
I have independent learning habits. I do not rely on the teacher to “remind” me.	☐	☐	☐	☐	☐	☐
I am organized; I am able to follow the course guidelines, calendar or schedule for assignment submissions, evaluations, etc..)	☐	☐	☐	☐	☐	☐
I willingly ask for assistance when I need it.	☐	☐	☐	☐	☐	☐
I can work independently: I investigate all avenues for help before I give up on an assignment or course.	☐	☐	☐	☐	☐	☐
I enjoy communicating online with others.	☐	☐	☐	☐	☐	☐
I am enthusiastic about the idea of learning with the use of a computer and I will happily spend a number of hours a week on a computer.	☐	☐	☐	☐	☐	☐
I enjoy learning using the computer.	☐	☐	☐	☐	☐	☐
I would never involve myself in hacking or sabotage online.	☐	☐	☐	☐	☐	☐
I can persevere at searching for information on the Internet.	☐	☐	☐	☐	☐	☐

Add up your scores and use this guide to help you make a decision:

- 80 – 100 - a strong candidate for learning fully online or in a hybrid course
- 60 – 80 - with perseverance, you could succeed online but hybrid learning may suit you best
- 40 – 60 - a hybrid or a classroom course may be best for you
- 0 – 40 - a classroom course may be best for you

Remember, technical skills required will be reviewed during the beginning of the course, and you will learn more as part of the course activities. Discuss your scores with your teacher or with the researcher, Heather Mace, if you would like assistance in making the best decision for you.

Researcher: Heather A. Mace
M.A. (Education) student
Faculty of Education
University of Ottawa

Contact ph:
information: email:

The purpose of this research study, which is part of a MA (Education) thesis, is to explore student and instructor perceptions of hybrid courses, in terms of how they contribute to their learning process. The purpose of the thesis is to develop expertise in the area of hybrid learning. Hybrid courses combine both classroom and computer-based delivery of course materials. Content accessed online, often done through course software such as BlackBoard, is defined as online material. The information gained from this inquiry will give me, learning professionals and the educational community insights into the use of hybrid courses as part of secondary programs and potentially lead to improvements in practice. This thesis project is a required component for a Master's of Arts in Education, and is under the supervision of Dr. Colla MacDonald, the thesis supervisor.

This research inquiry will take place within the context of the hybrid section of BTT20 (Introduction to Information Technology in Business) course, timetabled for the fall semester, 2005. This means you would attend scheduled face-to-face classes and completing the assigned online learning components. If you agree to participate in the research inquiry, you will be asked to complete three short surveys, two prior and one following the study, two short progress reports during the study, and potentially attend an hour-long discussion group during the week of December 5-9, 2005. All the materials, tapes and surveys, and the findings will be used as part of my thesis. Please note: you may enroll in the hybrid section without participating in the research inquiry.

The surveys will ask you for information on yourself, your education and, your background in using technology, the frequency you accessed electronic course materials, and your perception of its contribution to your learning within the course. It should take approximately 15 minutes each to complete. The interview will discuss the summary and conclusions drawn from the surveys, and to explore what it is like to learn in a hybrid course. The session will be audio-taped and transcribed by me. Within two weeks after the interview, you will be given a copy of a descriptive summary that I put together about the participants and our discussions. You will be asked to verify it and are encouraged to add, delete, or clarify any information you see fit.

Your participation is strictly voluntary, and that participation or non-participation in this project will have no bearing whatsoever on the evaluation of your performance in your course, nor on the support you receive. Throughout the study, your identity will be kept anonymous and pseudonyms will be used in any direct quotes taken from interviews, informal conversations, documents, or electronic materials. Your name will not appear in the research or any documents resulting from the research. Any information that could identify you will not be used in such a way that others could recognize you. To ensure the confidentiality all data will be stored in a secure manner and accessible only to me and my thesis supervisor. It will be kept in this manner until the completion of the thesis, archived for 5 years, and then destroyed. Without penalty, you may withdraw from this project at any time, refuse to participate, and choose not to answer questions.

In choosing to participate, you will be learning using both classroom and online strategies. You may find learning in an online environment challenging at first. The virtual classroom requires more independent work than the classroom, with both instruction and course work done by reading or writing text. The eLearning test guides you to consider various factors of online learning and your skills in relation to them. While you may be faced with the hurdles of learning in a different environment, your involvement in this study enables you to reflect on learning and the possibilities of online learning. The classroom components of the hybrid model are also incorporated to ensure that you are sufficient personal contact with your teacher. Additionally, when the need arises online, both your teacher and I will be available electronically for technical and educational support.

The University of Ottawa Research Ethics Board has approved this project. Any information, requests, or complaints about the ethical conduct of the project may be addressed to the Protocol Officer for Ethics in Research, 550 Cumberland Street, Room 160, (613) 562-5387 or ethics@uottawa.ca, or to my thesis supervisor; Dr. Colla MacDonald (LMX 417, phone: 613-562-5800 x 4110 or email: cjmacdon@uottawa.ca).

If you have any questions about this research now, or at any time throughout the project, please feel free to email me at . To indicate your decision to participate in this study, please sign this consent letter, it, and return it me by placing it in the Hybrid Study Envelope in your classroom. You may also want to keep a copy of this letter for your records.

I, _____ (*print name*), am interested in collaborating in this research project conducted by Heather A. Mace and I certify that I understand the nature of the research as described above.

Signature of participant

Date

Signature of researcher

Date

I wish to receive a summary of the findings of this research, which will be sent to me electronically by the researcher in June, 2006.

☐ YES ☐ NO (please check)

If yes, please indicate an email address for sending the summary: _____

Demographic Survey

This survey solicits relevant information about you for the hybrid model study. This information is for the sole use of the researcher and will not be shared with others in a manner that identifies you in any way.

Note: Text fields are indicated by grey boxes; click on the box to enter text or to check a response. Fields will expand to accommodate whatever text you enter.

Name: _____
 Email: _____
 Phone number: _____

Your profile

1. Indicate your gender. ☐ Male ☐ Female
2. What is your age?
☐ 18-24 ☐ 25-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60 or older?
3. What is your first language?
☐ English ☐ French ☐ Other (please specify) _____
4. Please select the statement(s) below that best describes you.
☐ Single ☐ Married ☐ Separated/Divorced
5. Do you have any children? ☐ Yes ☐ No
 If yes, how many children do you have? _____
 If yes, are your children living with you? _____
6. Where do you live?
☐ With my parents ☐ On my own ☐ With my family
☐ Other (please specify) _____
7. Do you have a job outside of school? ☐ Yes ☐ No
 If yes, please indicate how many hours a week you work: _____
8. How do you get to school most days?
☐ Walk ☐ Bus ☐ Car
9. How long does it take you to get to school most days? _____
10. Is there anything else you would like to share that you feel is relevant?

Your education

11. Have you ever taken participated in online learning before? ☐ Yes ☐ No
12. Are you trying to finish your Ontario Secondary School Diploma? ☐ Yes ☐ No
13. What school did you attend prior to this school? _____

14. When did you last attend another school? _____

15. Why are you enrolled at this school? _____

16. How many courses are you taking this semester? _____.

Please list your other courses.

17. Why are you taking this course? _____

18. Do you have any special learning needs? ☐ No ☐ Yes.

If yes, please describe below.

19. Describe yourself as a student.

20. Describe your experience with education so far.

21. How do you prefer to learn?

☐ alone ☐ with others ☐ both

Your computer experience

22. Do you have a computer at home? ☐ Yes ☐ No

23. Do you have your own email address? ☐ Yes ☐ No

24. What type of Internet access do you have at home?

☐ None ☐ High-speed ☐ Dial-up

Course Leaver Survey

This survey solicits relevant information about your choice to drop this hybrid course. This information is for the sole use of the researcher and will not be shared with others in a manner that identifies you in any way.

Name: _____

Statement	SD	D	A	SA	NA
1. The teacher needed to respond more quickly when I need information or help.	☐	☐	☐	☐	☐
2. I was able to get computer support easily when I needed it.	☐	☐	☐	☐	☐
3. I found the online components of the course to hard to schedule into my day.	☐	☐	☐	☐	☐
4. The classroom part of the course did not meet my needs.	☐	☐	☐	☐	☐
5. As a result of doing my assignments, I gained new knowledge.	☐	☐	☐	☐	☐
6. As a result of doing my assignments, I gained useful new skills.	☐	☐	☐	☐	☐
7. I used the online quizzes to test my knowledge.	☐	☐	☐	☐	☐
8. I found it challenging to “navigate” through the content online.	☐	☐	☐	☐	☐
9. I accessed the online parts of the course <u>when</u> it was convenient for me.	☐	☐	☐	☐	☐
10. I accessed the online parts of the course off school campus.	☐	☐	☐	☐	☐
11. I read messages posted in the discussion forum.	☐	☐	☐	☐	☐
12. I contributed to the discussion forum.	☐	☐	☐	☐	☐
13. The buttons on the screen did what they were supposed to do (e.g., links to websites, files,...)	☐	☐	☐	☐	☐
14. I had trouble understanding what I am supposed to do in the course (e.g., reading, assignments, etc...)	☐	☐	☐	☐	☐
15. I enjoyed the online components of this course because it gave me greater flexibility during the week.	☐	☐	☐	☐	☐
16. The classroom components of this course kept me motivated.	☐	☐	☐	☐	☐
17. I am switching to a fully classroom-based course because it will be better for my learning needs.	☐	☐	☐	☐	☐
18. Overall, I enjoyed this hybrid learning experience.	☐	☐	☐	☐	☐
19. If there were other courses offered in this way, I would take them.	☐	☐	☐	☐	☐

20. Complete this sentence. The reason I am dropping this course is...

21. Describe your experience with education this semester.

22. *Complete this sentence.* I enjoyed the following things about the hybrid course...

23. *Complete this sentence.* I struggled or disliked the following things about the hybrid course... (class and online components) ...

Thank you for taking the time to provide this information.

Pre-course Survey

(email body text)

Thank you for taking the time to complete this survey. As was previously highlighted, I am gathering information on students' perspectives of hybrid courses. During this study, online materials refer to those you access through BlackBoard. This Internet-based program creates a virtual classroom for you where you can reach class announcements, download handouts, or complete learning activities. It also contains features such as quizzes, grade functions, or chat rooms that promote interaction. The chat rooms will be used for virtual discussions, while the online quizzes allow you to input answers to questions that are automatically graded. Only students registered in your section of BTT2O can access these materials.

The online learning components used in conjunction with your face-to-face classes may include a variety of features that have a positive or negative impact on your learning experience. These features may be present infrequently or consistently over the course. Your personal appraisal of your experience with hybrid learning gives valuable information about how effective the hybrid model has been.

All responses will remain anonymous and will be pooled for analysis; you will not be identified in any way. A summary of the findings will be made available once all data have been collected and analyzed. No one other than the researcher and thesis supervisor will have access to the surveys. If you require further information do not hesitate to contact Heather Mace, University of Ottawa, at

Thank you in advance for your time and co-operation in this research.

(sent as an attachment with email)

Pre-Course Survey

MA(Ed) Thesis Project
 Researcher: Heather A. Mace

This survey provides the researcher with key and relevant information about you for the hybrid model study. This information is for the sole use of the researcher and will not be shared with others in a manner that identifies you in any way.

Note: Text fields are indicated by grey boxes; click on the box to enter text or to check a response. Fields will expand to accommodate whatever text you enter.

Name: _____

1. Where do you plan to access the online components of this course?
☐ Home ☐ School computers ☐ Other (please specify) _____
2. How often do you expect to access the online components of this course?
☐ 1-3 times a week ☐ 4-5 times a week ☐ daily ☐ twice a day or more
3. During non-class days, how do you plan to get your online work done?
☐ I will schedule a certain time each week to get my online work done.
☐ I will work around my other commitments each week to get my online work done.
4. In terms of your comfort with using computers, how do you rate yourself:
☐ Beginner - *I have very little experience*
☐ Novice – *I use the computer occasionally for email, word processing, games, searching the web, etc... but I often need help to do so*
☐ Intermediate - *I use a computer regularly for email, word processing, or, searching the web but I sometimes need help to do so*
☐ Experienced - *I use the computer every day and with a variety of applications (e.g., email, word processing, games, and searching the web,...)*
☐ Super User - *I use a variety of applications, I can install programs, solve computer-related problems and I could help others.*
5. Rate your typing skills. If you know your 'wpm' typing rate, list it here: _____.

☐ One finger typing, searching for keys	☐ One finger typing, fairly quick	☐ Hands on proper keys but cannot look away	☐ Hands on proper keys without looking
---	--	---	--
6. How often do you use the Internet to search for information?

☐ Less than every 2 weeks	☐ Once every 2 weeks	☐ Once a week	☐ More than twice a week	☐ More than four times a week
--	--	---	---	--

7. For each of the computer applications below, please rate your skills or abilities.

Application	Begin.	Novice	Int.	Exp.	Super User
Internet communication: e-mail	☐	☐	☐	☐	☐
Internet communication: MSN Messenger, chat rooms, etc...	☐	☐	☐	☐	☐
Internet navigation: (Netscape, Explorer,...)	☐	☐	☐	☐	☐
Internet searches: Google, Yahoo...	☐	☐	☐	☐	☐
Internet: Creating web pages with a web editor or html	☐	☐	☐	☐	☐
Word Processing (MS Word or Word Perfect)	☐	☐	☐	☐	☐
Presentation software: Power Point	☐	☐	☐	☐	☐
Graphics/arts programs: PhotoShop, PaintShop PRO, CorelDraw, etc.	☐	☐	☐	☐	☐
Spreadsheet packages (Excel)	☐	☐	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐

Your Learning

8. *Complete this sentence.* The advantages of the online components of this hybrid course for me will be...

9. *Complete this sentence.* The advantages of the classroom parts of this hybrid course for me will be...

10. *Complete this sentence.* The disadvantages of the online components of this hybrid course for me will be...

11. *Complete this sentence.* The disadvantages of the classroom parts of this hybrid course for me will be...

12. *Complete this sentence.* I expect to learn the following things from this course...

Please save this file as "yourname-response" (for example: Heather-response) and send it back to me at hmace@uottawa.ca by Sunday, February 19th at the latest. Thank you!

Temperature Check

For the following statements, rate your response as strongly disagree (SD), disagree (D), strongly agree (SA), agree (A), or not applicable (NA). Be sure to read each statement carefully.

Statement	SD	D	A	SA	NA
1. The teacher should respond more quickly when I need information or help.	☐	☐	☐	☐	☐
2. I was able to get computer support easily when I needed it.	☐	☐	☐	☐	☐
3. As a result of doing my assignments this month, I gained new knowledge.	☐	☐	☐	☐	☐
4. As a result of doing my assignments this month, I gained useful new skills.	☐	☐	☐	☐	☐
5. I used the online quizzes to test my knowledge.	☐	☐	☐	☐	☐
6. I found it challenging to “navigate” through the content online.	☐	☐	☐	☐	☐
7. This month, I accessed the online parts of the course <u>when</u> it was convenient for me.	☐	☐	☐	☐	☐
8. This month, I accessed the online parts of the course off school campus.	☐	☐	☐	☐	☐
9. This month, I read messages posted in the discussion forum.	☐	☐	☐	☐	☐
10. This month, I contributed to the discussion forum.	☐	☐	☐	☐	☐
11. The buttons on the screen did what they were supposed to do (e.g., links to websites, files,...)	☐	☐	☐	☐	☐
12. I understand what I am supposed to do in the course (e.g., reading, assignments, etc...)	☐	☐	☐	☐	☐
13. I am enjoying the online components of this course because it gives me greater flexibility during the week.	☐	☐	☐	☐	☐
14. The classroom components of this course keep me motivated.	☐	☐	☐	☐	☐
15. I would rather learn in a classroom-based course.	☐	☐	☐	☐	☐
16. Overall, I am enjoying this hybrid learning experience.	☐	☐	☐	☐	☐
17. I am excited about continuing to learn in this way.	☐	☐	☐	☐	☐
18. If there were other courses offered in this way, I would take them.	☐	☐	☐	☐	☐

Short answer questions

19. *Complete this sentence.* Two advantages of the hybrid course (class and online components) this month have been...
20. *Complete this sentence.* Two disadvantages of the hybrid course (class and online components) this month have been...
21. How can the online part of the course be improved for you?
22. How can the classroom part of the course be improved for you?
23. Is there anything you would like to add? Consider giving more information for any statements that you responded SA or SD.

Adapted from: 1) Casimiro, L. (2005). Assessment of an E-learning experience designed with the Demand Driven Learning Model (DDLm) to facilitate interprofessional collaborative patient-centred practice (ICPCP). Unpublished master's thesis proposal, University of Ottawa, Ottawa, Ontario, Canada.
 2) MacDonald, C.J., Breithaupt, K., Stodel, E.J., Farres, L.G., & Gabriel, M.A. (2002). Evaluation of web-based educational programs: A pilot study of the Demand-Driven Learning Model. *International Journal of Testing*, 2(1): 35-61.

Post-course Survey

(text for email message)

Thank you for taking the time to complete this survey. You have now had a great deal of experience with a hybrid course. Your reflections on how the course contributed positively or negatively to your learning experience will provide valuable information about the effectiveness of this hybrid model.

As always, all responses will remain anonymous and will be pooled for analysis; you will not be identified in any way. A summary of the findings will be made available once all data have been collected and analyzed. No one other than the researcher and thesis supervisor will have access to the surveys. If you require further information do not hesitate to contact Heather Mace, University of Ottawa, at,

Thank you in advance for your time and co-operation in this research.

(sent as an attachment with email)

Post-Course Survey

MA(Ed) Thesis Project
 Researcher: Heather A. Mace

This survey provides the researcher with key and relevant information about your experience with the hybrid delivery model. This information is for the sole use of the researcher and will not be shared with others in a manner that identifies you in any way.

Note: Text fields are indicated by grey boxes; click on the box to enter text or to check a response. Fields will expand to accommodate whatever text you enter.

Name: _____

1. Where did you access the online components of this course?
☐ Home ☐ School computers ☐ Other (please specify) _____
2. How often did you to access the online components of this course?
☐ 1-3 times a week ☐ 4-5 times a week ☐ daily ☐ twice a day or more
3. Did you find the course to be ☐ more work, ☐ less work, and ☐ about what you expected?
4. Select all the statements below that best describe your experience with completing your online work.
☐ I found it easy to schedule a certain time each week to get my online work done.
☐ I was able to work around my other commitments each week to get my online work done.
☐ Sometimes I found it hard to get my online work done at home because my other commitments interfered.
☐ Sometimes I found it hard to get my work done because I couldn't get the computer to work properly.
☐ Sometimes I found it hard to get my work done because I didn't understand how to do it.
5. Rate your typing skills. If you know your 'wpm' typing rate, list it here: _____.

One finger	One finger	Hands on	Hands on
☐ typing, searching for keys	☐ typing, fairly quick	☐ proper keys but cannot look away	☐ proper keys without looking
6. How often do you use the Internet to search for information?

☐ Less than every 2 weeks	☐ Once every 2 weeks	☐ Once a week	☐ More than twice a week	☐ More than four times a week
--	---	--------------------------------------	---	--

7. In terms of your comfort with using computers, how do you rate yourself:

- ☐ Beginner - *I have very little experience*
- ☐ Novice – *I use the computer occasionally for email, chatting, word processing, games, searching the web, etc... but I often need help to do so*
- ☐ Intermediate - *I use a computer regularly for email, chatting, word processing, or, searching the web but I sometimes need help to do so*
- ☐ Experienced - *I use the computer every day and with a variety of applications (e.g., email, word processing, games, and searching the web, ...)*
- ☐ Super User - *I use a variety of applications, I can install programs, solve computer-related problems and I could help others.*

8. For each of the computer applications below, please rate your skills or abilities.

Application	Begin.	Novice	Int.	Exp.	Super User
Internet communication: e-mail	☐	☐	☐	☐	☐
Internet communication: MSN Messenger, chat rooms, etc...	☐	☐	☐	☐	☐
Internet navigation: (Netscape, Explorer,...)	☐	☐	☐	☐	☐
Internet searches: Google, Yahoo...	☐	☐	☐	☐	☐
Internet: Creating web pages with a web editor or html	☐	☐	☐	☐	☐
Word Processing (MS Word or Word Perfect)	☐	☐	☐	☐	☐
Presentation software: Power Point	☐	☐	☐	☐	☐
Graphics/arts programs: PhotoShop, PaintShop Pro, CorelDraw, etc.	☐	☐	☐	☐	☐
Spreadsheet packages (Excel)	☐	☐	☐	☐	☐
Other (please specify)	☐	☐	☐	☐	☐

9. Describe yourself as a student.

10. Describe your experience with education this semester.

11. *Complete this sentence.* The advantages of the online components of this hybrid course for me were...

12. *Complete this sentence.* The advantages of the classroom parts of this hybrid course for me were...

13. *Complete this sentence.* The disadvantages of the online components of this hybrid course for me were...

14. *Complete this sentence.* The disadvantages of the classroom parts of this hybrid course for me were...

15. *Complete this sentence.* I have learned the following things from this course...

Pre-course survey (n = 35; 16 female, 19 male)

How often do you use the Internet to search for information?		Where do you plan to access the online components of this course?
< every 2 wks	2	Home (16) School (16)
every 2 wks	1	
1x per week	7	
>2x per week	12	
>4x per week	11	
In terms of your comfort with using computers, how do you rate yourself:		How often do you expect to access the online components of this course?
Beginner	5	1-3 times/wk (14) 4-5 times/wk (11) daily (10)
Novice	5	
Intermediate	12	
Experienced	8	
Super User	4	
		During non-class days, how do you plan to get your online work done?
		Same time/week (17) Different time/week (15)

Note: # of learners indicated in parentheses, unless otherwise indicated

Learner rating of comfort level with computer tasks:

	B	N	I	E	S
Internet communication: e-mail	3	1	11	12	7
Internet communication: MSN Messenger, chat rooms, etc...	4	4	7	11	7
Internet navigation: (Netscape, Explorer,...)	6	4	8	8	6
Internet searches: Google, Yahoo...	2	3	7	15	7
Internet: Creating web pages with a web editor or html	14	5	4	2	3
Word Processing (MS Word or Word Perfect)	4	5	14	8	3
Presentation software: Power Point	10	8	10	4	1
Graphics/arts programs: PhotoShop, PaintShop PRO, CorelDraw, etc.	13	5	9	3	2
Spreadsheet packages (Excel)	11	6	9	5	2

B=beginner, N=novice, I=intermediate, E=expert, S=super user

Learner comments on advantages and disadvantages for online and classroom environments

Advantages	Disadvantages
eLearning	
- a good experience to learn more about computer programs - allow me to work around my work schedule - doing it anytime of the day - easy to get caught up in my school work - help me stay in contact - I can do my work and where - I can get help right away as needed - I get more experience with different teaching strategies. - i can work on my class more, - I will be able to work around class time - independent learning on my own time - independent learning (3 responses) - being able to access what I might miss if I am off from school. - It's good cause it gives you experience before going to college. - more computer experience - practising learning online and i don't have to come to	- already knowing what to do and not learn anything - if u need a instructor she not there to tell u where to go. - get me used to working with computers and getting used to the program. - I can't really think of a disadvantage - i have no excuse when i miss a class - I might get distracted - I sometimes find it confusing because I am a beginner. - if i can not get computer easily, if the computer freeze - if the internet is down then there is a uncertain wait time, lack of personal interaction. - less contact with instructor and get closer to machinism - maybe i won't have the program? - missing the classroom - my computer might shutdown - no access to computer - no body to ask if you don't get something - you will lose everything if you forget save

- class • save time (2 responses) • schedule my time - comparing online to classroom learning • to enhance my computer skills • to help me communicate with the instructor, or completing subjects • to know more of what can be offered to learn • to prepare for the new system that I'll be facing • very rewarding in my knowledge and understanding. • will be able to work around my job schedule • working at your own pace. • I do not have to come to school to do my work • That I am used to dealing with computers	• no one to help guide me if I need help • no instructor • no, one on one. • not convenient • not knowing what to do. • not understanding the components • some new program that I haven't learned • sometimes I may have internet problems • none or not sure (4 responses) • you may have problems and you need help
F2F	
• the classroom is better (2 responses) • can ask for help when needed. • doing it as fast as I can to surf the net • giving me more to think about. • having help at hand when I need it • help me to understand the advantages of doing projects online in case i am absent • I can get face to face help • I learn more from other student • I will be asking the instructor for help every time i need or the student helper • if I run in to trouble I may not get the answers I need in order to submit my work on time • it's always nice to have a instructor • one on one with the instructor • prepare for college • instructor helps me. • that we still have the instructor on hand to answer any question I might have. • the instructor will be there to answer any questions • to participate and be able to be in class to ask for help. • to spend time online and explore • will be able to ask the instructor questions and get one on one help if i need it • you get ask the instructor if you don't get something • not sure (4 responses)	• If I finish earlier, I may have to stay back until class is dismissed • boring • I want to improve my keyboarding/ word processing skills; I would like to get familiar with as many programs as I possible. • if there are no computers available instructor to explain • In our case we have problems with getting work done in this class because we have loads of people that creat distractions. • it will be extra work, out side of the school • less time to do work, sometimes instructor busy teaching others. • Listening to the instructor..lol just kidding • not having enough computers (2 responses) • not understanding the programs. • self helpful • too many students • use more time • none perceived (10 responses)

Temperature check (n=12; 4 female, 8 male)

Statements	SA	A	D	SD	NA	NR
Content						
As a result of doing my assignments this month, I gained new knowledge.	0	1	5	6	0	0
As a result of doing my assignments this month, I gained useful new skills.	0	1	5	6	0	0
I understand what I am supposed to do in the course (e.g., reading, assignments, etc...)	0	0	6	6	0	0
Delivery						
I used the online quizzes to test my knowledge.	0	2	5	5	0	0
I found it challenging to “navigate” through the content online.	0	5	5	2	0	0
This month, I accessed the online parts of the course <u>when</u> it was convenient for me.	1	3	5	2	1	0
This month, I accessed the online parts of the course off school campus.	1	6	2	2	1	0
This month, I read messages posted in the discussion forum.	0	3	6	1	2	0
This month, I contributed to the discussion forum.	1	5	1	1	4	0
I am enjoying the online components of this course because it gives me greater flexibility during the week.	0	1	5	4	2	0
Service						
The teacher should respond more quickly when I need information or help.	3	3	4	0	2	0
I was able to get computer support easily when I needed it.	0	0	5	7	0	0
The buttons on the screen did what they were supposed to do (e.g., links to websites, files,...)	0	0	7	3	1	1
Outcomes						
The classroom components of this course keep me motivated.	0	0	6	6	0	0
I would rather learn in a classroom-based course.	0	2	5	2	2	1
I am excited about continuing to learn in this way.	0	0	6	4	2	0
If there were other courses offered in this way, I would take them.	0	0	5	6	1	0
Overall, I am enjoying this hybrid learning experience.	0	0	7	4	1	0

Learner comments about hybrid learning	
Advantages	Disadvantages
- convenience; feeling more independent - doing work outside of class and easy to catch up on work missed - flexible time, that's what I felt. Another advantage is the quiet time - for me it would have been convenience and saving some time or extending the time of study if I had time to go online - I can do my class work at home even I didn't come to school (<i>2 separate learners made the same comment</i>) - more flexibility with my time / instructor available as needed - I can check work when I have missed a class and go online when I am not at school - convenience overall and more skills that are interesting to learn - useful for all students to know more about how to use the computer - verification of subject learned in class - 24-7 access - we can learn more / we will be more independent - not too long in front the computer. Damage your eyes - because I can use at home or in any other computer - just know new stuffs	- if you need personal help; when you get stuck on something at home - I don't have any disadvantages about the hybrid course - It is sometimes confusing as to uploading and downloading files / Asking questions through online is not effective since you can understand very well what you want to do - misunderstanding that it would be assumed we know or understood material online - instructor not giving enough instructions - more confusing than learning in classroom. Asking question by online is not effect it. - no disadvantages. I really enjoyed the class - no one-on-one. I like having a instructor teach you. - another disadvantage is the teaching is not to easy. - none - sometimes no access to internet and if I can't understand the work no instructor around well it's already as good as it is to me but only problem is not instructor around to help me if I don't understand
Learner suggestions for improvement learning environments	
online	classroom
- better instructor. In another word, better assignments. - if could be used at home - it can be improved if maybe we had a couple days off school so we can actually try it from home and see how it is learning from home. - perhaps if it were implemented - somehow students should be forced to go online because otherwise it is very difficult to go online for students like me having a full time job and school - work on our understanding of using online course - include video/audio - have full access to the instructor - we should do the online course more often - it could be more sophisticated - Maybe a chat discussion area with a phone line with a live person if required	- because if I need some help or if I have questions, my instructor is here and she can help me - giving short assignments that can be done in one or two hours of class instead long ones so students won't have too many problems - having more assignment on different areas of the course - it was already pretty well set-up. The instructor is great! - Maybe, more to offer - More assignment daily. - need more than one instructor to help - The classroom part of the class can be improved if maybe we had video clips or sound clips, and maybe a digital camera for pictures. - There's no need for improvement. It is very good as it is.

Post-course Survey (n = 10; 4 female, 6 male).

How often do you use the Internet to search for information? <i>< every 2 wks</i> 0 <i>every 2 wks</i> 0 <i>1x per week</i> 1 <i>>2x per week</i> 4 <i>>4x per week</i> 5	Where did you access the online components of this course? <i>Home (0)</i> <i>School (8)</i> How often did you access the online components of this course? <i>1-3 times/wk (5)</i> <i>4-5 times/wk (4)</i> <i>daily (1)</i>
In terms of your comfort with using computers, how do you rate yourself: <i>Beginner</i> 0 <i>Novice</i> 0 <i>Intermediate</i> 1 <i>Experienced</i> 8 <i>Super User</i> 1	During non-class days, how do you plan to get your online work done? <i>Same time/week (17)</i> <i>Different time/week (15)</i> How did you find the workload of this course? <i>More work than expected</i> 2 <i>Less work than expected</i> 3 <i>As expected</i> 5

Select all the statements below that best describe your experience with completing your online work.

- (4) *I found it easy to schedule a certain time each week to get my online work done.*
(3) *I was able to work around my other commitments each week to get my online work done.*
(1) *Sometimes I found it hard to get my online work done at home because my other commitments interfered.*
(1) *Sometimes I found it hard to get my work done because I couldn't get the computer to work properly.*
(0) *Sometimes I found it hard to get my work done because I didn't understand*

In terms of your comfort with using computers, how do you rate yourself:

	B	N	I	E	S
Internet communication: e-mail	0	2	4	2	2
Internet communication: MSN Messenger, chat rooms, etc...	0	1	4	3	2
Internet navigation: (Netscape, Explorer,...)	0	0	4	4	2
Internet searches: Google, Yahoo...	0	0	4	4	2
Internet: Creating web pages with a web editor or html	4	2	1	2	0
Word Processing (MS Word or Word Perfect)	1	0	2	3	4
Presentation software: Power Point	0	2	3	4	1
Graphics/arts programs: PhotoShop, PaintShop Pro, CorelDraw, etc.	2	3	2	2	0
Spreadsheet packages (Excel)	1	0	4	4	1

B=beginner, N=novice, I=intermediate, E=expert, S=super user

Learner comments on eLearning and F2F environments	
Advantages	Disadvantages
eLearning	
• doing it whenever you want and still have time to do whatever I gotta do on the side • I could do the assigned work in the privacy of my home, and at a time that was convenient for me. • I felt confident about my skills • if I did not complete an assignment I could still get the info at home • It gives me more knowledge about computer because everything has been developed wisely. • It was straight forward and easy to understand; Interesting work (didn't feel like school work) • knowledge to understand basic computers • that you can access components of the course from any computer • very fun because I'm experienced in computers	• can't get help from instructor • I can't anything wrong with it • It got hard when I was stuck and couldn't get immediate help. • online there is a lot of assignment • students are often distractive on the screen during the class • the disadvantages were that we didn't really get to experience the hybrid course from home, maybe if we had time off school to try it, it would have been fun • There were none (<i>4 responses</i>) • I wasn't able to leave after I finished my work. • not all information that I wanted was there
F2F	
• can get help from instructor • exciting, I got work done in half the time. • I could get help on the spot. The instructor explained exactly what she expected on the assignment. • I was able to ask the instructor for help (<i>4 similar responses</i>). • in classroom we are doing daily work and asking question to instructors • Share all the information with colleagues • the instructor was still there if problems or questions arose • I got to meet a really great instructor who I have learned a lot from	• afraid of making silly question in front of others that may be observed in this way • can't make other time for other things to do and can't do it whenever you want. • I don't like I.S.U. • some students were at different places all the time. • there were none (<i>4 responses</i>)

Learner Discussion Group

Participants were asked to read the summary of data collection prior to beginning the discussion group. Discussion were based on the summary and extended the information.

1. Please introduce yourself and share your future plans for school or otherwise after this semester.
2. Describe how you scheduled your week to complete assignments as part of the hybrid course.
3. Certain features have been identified as useful in the online materials for your courses. How have these been useful to you in the course?
4. Certain features have been identified as useful in the classroom materials for your courses. How have these been useful to you in the course?
5. Perhaps there were times in the course where you wanted to drop it or quit. Describe what kept you going.
6. If you imagine the ideal hybrid course delivery, what features does it include?
7. It takes hours of time to create online materials. In terms of your use of the online materials this semester, do you think these materials contribute significantly to your learning experience?
8. Is there anything further you would like to add that you feel is relevant to this study?

The participants were thanked for their time, and a transcript of the discussion group, along with a revised summary of the research was sent to them 2 weeks following the discussion group.

Instructor: Pre Course

1. In using a hybrid delivery method of course delivery, what are the advantages for your learners of balancing online and classroom learning?
2. In using a hybrid delivery method of course delivery, what are the disadvantages for your learners of balancing online and classroom learning?
3. How have you structured your learning activities to best incorporate both the classroom and the online environment?

Instructor: Post Course

1. In using a hybrid delivery method of course delivery, what were the advantages for your learners with balancing online and classroom learning?
2. In using a hybrid delivery method of course delivery, what were the disadvantages for your learners with balancing online and classroom learning?
3. How would you change the structure of your learning activities to better suit the needs of your learners?
4. Is there any other information you would like to share that might be relevant to your experience with delivery a course using hybrid learning?

After each interview, the instructor was thanked for her time and involvement in the study, and a transcript was sent to her via email within a week.