HELP SEEKING IN AN ONLINE ENVIRONMENT

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This qualitative case study examines the help seeking behaviors of 28 undergraduate students. This research identifies: the type of help they seek, from whom they seek help, and when they seek help. This research also investigates: the relationship between self-esteem and help seeking in an online environment and the use of self-regulated learning strategies in an online learning environment.

This research utilizes grounded theory as its theoretical framework. To investigate help seeking in an online environment, this study employed questionnaires, standardized tests, weekly journals, interviews, and focus groups.

In terms of type of help sought, students in an online course seek executive help rather than instrumental help. It was also discovered that the majority of the students get frustrated with their inability to solve problems without help and assume that an online class is easier and less time-consuming. When examining from whom students seek
help, the majority of the students appear to seek informal help from their friends, but formal help from their instructor. In terms of when students seek help, the findings suggest they seek help almost immediately.

In investigating the relationship between self-esteem and help seeking in an online environment, the findings reveal that the majority of the students are correct in their self-analysis of their level of self-esteem. It was also discovered that the majority of the students, regardless of their level of self-esteem, are open to seeking help. This inquiry also reveals that students consider self-esteem a multidimensional construct (i.e., academic self-esteem versus social self-esteem).

When examining the use of self-regulated learning strategies in an online learning environment, the findings reveal that only half the students use higher level learning strategies. In addition, this research suggests that the majority of the students use the same learning strategies in the online learning environment as in a face-to-face environment.

In conclusion, future researchers need to: include collaborative activities in online learning to promote instrumental help seeking, take into account the fact that
self-esteem is multidimensional, design activities that will lead to deep learning, and inform students of the role adjustments that the online students have to make.

Approved:

Teresa Franklin

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I dedicate this dissertation to my Mom, Dad, Brothers, 
Sister-in-Law, Nephew, Niece, and Dr. Todd Wirth.
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Two types of self-esteem were identified, namely, academic self-esteem and social self-esteem.

The Relationship of Self-Esteem to Help Seeking
The majority of the students, regardless of their level of self-esteem, were open to seeking help.

Research Question Three

The Self-Regulated Learning Strategies of the Students

Only half the students used higher level learning strategies

Learning Strategies Used in the Online Learning Environment

The majority of the students used the same learning strategies in the online environment as in a face-to-face environment.

Summary

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Theme three: The majority of the students assumed that an online class is easier and less time-consuming.

Theme four: The majority of the students sought informal help from their friends but formal help from their instructor.
Theme five: Students sought help almost immediately..............

Research Question Two..............

Theme six: The majority of the students were correct in their self-analysis of their level of self-esteem.............

Theme seven: Two types of self-esteem were identified, namely, academic self-esteem and social self-esteem..................

Theme eight: The majority of the students, regardless of their level of self-esteem, were open to seeking help..................

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CHAPTER ONE

Introduction

Background

In the United States of America, values of individualism, self-sufficiency, and autonomy are believed to represent well-being, maturity, and competence. “These traditional notions of the overwhelming value of autonomous functioning and individual problem solving are keenly illustrated by the predominantly individualistic and competitively structured American school system...” (Nelson-Le Gall, 1992, p. 49). However, over the past few decades, the emphasis has shifted to the role of social interaction (Nelson-Le Gall). Learning does not occur in isolation. Learners are affected by the social and cultural environment that surrounds them (Nelson-Le Gall, 1985). “It is acknowledged across the variety of disciplines concerned with human development and educational processes that the study of cognition and learning requires explicit consideration of the social context in which the acquisition and utilization of knowledge takes place” (Nelson-Le Gall, 1992, p.49).

Learning involves the process of effecting change in the learners' knowledge and skills. As a consequence, in
order to make those changes, learners may seek help from others. Help seeking has become a topic of growing interest for educators. Many scholars believe that one of the most important skills a child may possess is the ability to use adults and peers as resources to overcome learning difficulties (Nelson-Le Gall, 1985).

Help seeking, however, is a phenomenon that can be found in many different contexts. Some prototypical examples of help seeking are:

A student stuck on a particular problem might ask a teacher or classmate for a hint. A confused traveler might stop to ask for directions. A person in pain might seek the help of a physician, whereas those suffering from psychological distress might bring their problem to a friend or relative, a bartender or hairdresser, or a psychologist or psychiatrist (DePaulo, 1983, p.3).

An individual may seek help when the individual has a problem and when the problem can be solved through the time, effort, and resources of other people who are committed to it. However, in many instances, students will bite their pencils in puzzlement, travelers will drive around in circles, and the ailing or distressed will suffer
in silence rather than seek help. It seems then that people who need help may not always seek it. It may be inferred that help seeking has psychological costs associated with it. Some of the psychological costs include embarrassment, fear of rejection, reluctance to incur debts, reluctance to show one’s insufficiencies, reluctance to disclose something personal, reluctance to be an imposition on the helper and the need to be independent in solving one’s problem. Those who do seek help often do so indirectly through nonverbal cues, subtle and not-so-subtle hints, story-telling or experience-swapping (DePaulo, 1983).

The benefits and the costs in seeking help suggest that the different disciplines approach the phenomenon from very different perspectives. Literature from disciplines such as sociology, social work, rehabilitation psychology and gerontology portray helping relationships as bleak. DePaulo (1983) argues that in these fields, the help seeker may be viewed as inadequate and inferior. Literature from the fields of medical psychology and sociology, on the other hand, view help-seeking as instrumental and adaptive. It is viewed as a positive coping behavior. At the same time however, the help seeker may view himself or herself as weak, incompetent, unable to cope, and a failure.
Literature from the field of developmental psychology view help-seeking as a set of attachment behaviors. It is either a form of clinging dependency or a competent coping behavior (DePaulo, 1983).

That is, help-seeking, in combination with other related behaviors, is sometimes best described as a manifestation of dependency and insecurity, but at other times, when it co-occurs with different behaviors, it is more accurately described as a manifestation of autonomy and active mastery (DePaulo, 1983, pp 6-7).

Literature from the field of sociolinguistics view help-seeking as the study of how help-seekers use verbal directives or commands to get what they want. The help seeker is viewed as "the person in command, forcing the helper to comply with his or her request by subtle and even devious verbal strategies" (DePaulo, 1983, pp 6-7).

Literature from the field of experimental social psychology view help seeking as part of other topics. These topics include equity, reciprocity, indebtedness, attribution, embarrassment, etc. Very few of the researchers in this field were interested in help seeking per se (DePaulo, 1983) as it is viewed as a general phenomenon. Research on
help seeking in this field is more concerned with theory building. "It views the type of problem for which help is sought as a moderator within a larger conceptual scheme" (Nadler, 1991, p. 291).

The infinitive varieties of help-seeking is overwhelming. Can all the help seeking behaviors from all the different fields be considered as belonging together? The answer is no because they are all different in terms of the functions they serve, the coping mechanisms they involve, and the types of helpers they enlist (DePaulo, 1983).

In the educational setting, Nelson-Le Gall (1981) differentiates between two types of help seeking behavior in children, namely, executive help seeking and instrumental help seeking. Nelson-Le Gall (1985) states that "executive help seeking is dependency oriented and refers to those instances in which the child's intention is to have someone else solve a problem or attain a goal on his or her behalf" (p. 59). This type of help seeking may be detrimental to independent mastery. Instrumental help seeking, on the other hand, "is mastery oriented and refers to those instances in which the help requested is limited to the amount and type needed to allow children to solve
problems or attain goals for themselves" (p. 56). Children who have effective help seeking skills (instrumental or executive) can obtain help when they need it or refuse help when they can perform a task on their own (Nelson-Le Gall, 1985). The ability to use adults and peers as resources in learning situations is one of the most important skills that children can develop (Nelson-Le Gall, 1981).

**Statement of the Problem**

This research investigates the help seeking behaviors of college students taking a technology applications in education course online at a residential Midwestern university. Help seeking in an online environment is different from help seeking in a traditional classroom as there is little or no face-to-face contact with the instructor and tutors and there is minimum contact with other online students. This research seeks to investigate the type of help sought (instrumental or executive), from whom help was sought (instructor, tutors, classmates, students who had taken the course, family, friends, colleagues, etc.), and when it was sought.

Karabenick and Knapp (1991) found a direct relationship between self-esteem and instrumental help seeking. Students with high self-esteem were more likely to
seek help when it was needed whereas students with low self-esteem were more threatened by having to seek help and so they avoided it. However, there has not been any research conducted on the relationship between self-esteem and help seeking in an online environment. This research study attempts to do that.

Long (2003) argues that for online learners to be successful, they have to be self-regulated. As such, this research also seeks to investigate the use of self-regulated learning strategies in an online learning environment.

Research Questions

The questions that guide this research are as follows:

1. What types of help are sought, from whom help is sought, and when is help sought in an online environment.

2. What is the relationship of self-esteem to help seeking in an online environment.

3. What is the relationship of self-regulated learning to an online learning environment.

Significance of the Study

Even though there is an abundance of research on help seeking, very few studies have focused on instrumental help
seeking in learning environments (Knapp & Karabenick, 1991). Also, most of these studies have been conducted at the elementary school level (Nelson-Le Gall, 1987; Newman, 1990; Newman & Goldin, 1990). Only a few studies of academic help seeking have been conducted with college students in traditional classroom environments, (Karabenick & Knapp, 1991), and with college students in distance education programs (Taplin, Jegede, Fan & Chan, 2001). Cheong, Pajares, and Oberman (2004) argue that qualitative research in academic help seeking is needed as it can provide rich descriptions of the help seeking behavior of students. It is hoped that the results of this research will allow instructors to create online courses that take into account the help seeking behaviors of college students so that the online learning experience will be a productive one for both the instructor and the students.

Limitations

The research is limited to an online class on technology in education at the College of Education in a large Midwestern university. The use of Blackboard 5.0 as a Web-based management tool could also be a limiting factor, as it may not be as interactive or as comprehensive as other Web-based models. Another limiting factor is the
class structure. If the class were structured in a different way, the results of the research may very well be different.

**Definition of Terms**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Asynchronous communication</td>
<td>Asynchronous communication occurs at different times. There is a delay in feedback and response between the communicators.</td>
</tr>
<tr>
<td>Blackboard</td>
<td>Blackboard is a Web-based course management tool.</td>
</tr>
<tr>
<td>Distance education</td>
<td>Distance education is an educational process where the majority of instruction occurs when students and instructors are not in the same place. A distance education program may use correspondence, audio, video, or computer technologies.</td>
</tr>
<tr>
<td>Executive help seeking</td>
<td>Executive help seeking occurs when the student asks someone else to solve the problem for them.</td>
</tr>
<tr>
<td><strong>Instrumental help seeking</strong></td>
<td>Instrumental help seeking occurs when the student asks someone else for a hint in order to solve the problem.</td>
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<tr>
<td><strong>Online learning</strong></td>
<td>Online learning refers to learning that takes place by electronic means through the use of a computer. Students taking an online class are not required to be on campus. They can work with the course materials and on their assignments at their own convenience.</td>
</tr>
<tr>
<td><strong>Self-efficacy</strong></td>
<td>Self-efficacy refers to an individual's judgment of his or her own ability to succeed in reaching a specific goal.</td>
</tr>
<tr>
<td><strong>Self-esteem</strong></td>
<td>Self-esteem refers to how much an individual likes himself or herself.</td>
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Self-regulated learning refers to the students' efforts to monitor their own learning metacognitively, motivationally, and behaviorally.

Synchronous communication occurs in real time. There is immediate feedback and response.

**Summary**

This chapter introduces the concept of help seeking as a phenomenon that occurs in many different contexts. An individual may seek help when there is a problem that can be solved through the effort of other people. Nonetheless, in many instances, the individual may suffer in silence rather than seek help. This implies that the psychological costs associated with help seeking may be far greater than the need to solve the problem. Different disciplines view helping and help seeking in a variety of ways. In the educational setting, the two types of help seeking behavior revealed by children are executive help seeking and instrumental help seeking. Executive help seeking may be detrimental to independent mastery as the child wants someone else to solve the problem. Instrumental help seeking, on the other hand, is mastery oriented. The child
asks for hints in order to solve the problem. This ability to seek instrumental help is an important learning skill (Nelson-Le Gall, 1985).

This research investigates the help seeking behaviors of college students taking an online technology applications in education course at a large residential Midwestern university. This research seeks to investigate the type of help sought (instrumental or executive), from whom they were sought (instructor, tutors, classmates, students who had taken the course, family, friends, colleagues, etc.), and when it was sought. This research also investigates the relationship of self-esteem to help seeking in an online learning environment, and the use of self-regulated learning strategies in an online environment.
CHAPTER TWO

Literature Review

According to Nelson-Le Gall (1985), there is no theoretical perspective in help seeking that is widely accepted. The two most influential conceptions that are guiding research come from social psychological and sociological literatures. These two literatures look at help seeking in adult populations. The approaches are known as social-normative models and self-esteem models and "focus on personal and sociocultural characteristics that are believed to moderate the perception of the costs of seeking help" (p. 56). The social-normative perspectives rely on the cultural values and social roles related to dependence and independence as the basis for explaining help seeking behavior. Help seeking is viewed as a social behavior. The self-esteem approach focuses on the decision to seek or not to seek help. The decision is rooted in personal beliefs (Nelson-Le Gall, 1985).

This case study attempted to generate a theoretical framework for academic help seeking in an online environment. As such, grounded theory formed the basis of the theoretical framework for this research study.
The **Grounded Theory Approach**

The general goal of grounded theory is to construct theories from qualitative data in order to understand phenomena (Glaser & Strauss, 1967). According to Corbin and Strauss (1990), concepts, categories, and hypotheses are the three basic elements of grounded theory. Corbin and Strauss argue that theories cannot be built from raw data. Concepts form the basic units of analysis as theory is developed from the conceptualization of data.

The incidents, events, and happenings are taken as, or analyzed as, potential indicators of phenomena, which are thereby given conceptual labels....Only by comparing incidents and naming like phenomena with the same term can a theorist accumulate the basic units for theory....Categories are higher in level and more abstract than the concepts they represent. They are generated through the same analytic process of making comparisons to highlight similarities and differences that is used to produce lower level concepts. Categories are the "cornerstones" of developing theory. They provide the means by which the theory can be integrated. Merely grouping concepts under a more abstract heading does not constitute a category
however. To achieve that status...a more abstract concept must be developed in terms of its properties and dimensions of the phenomenon it represents, conditions which give rise to it, the action/interaction by which it is expressed, and the consequences it produces....Through such specification, categories are defined and given explanatory power. Over time, categories can become related to one another to form a theory (Corbin & Strauss, 1990, p. 7-8).

The relationships between categories and the concepts they exemplify and between discrete categories are known as hypotheses. The process of building concepts, categories, and hypotheses is recursive. This iterative process generates grounded theory (Corbin & Strauss, 1990). Strauss and Corbin (1990) argue that grounded theory is derived inductively from the study of phenomena.

That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, then prove
it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge (Strauss & Corbin, 1990, p. 23).

For this case study, in order to generate grounded theory, the areas of interest that were examined were the interconnected areas of the adult learner, online learning, motivation, self-regulated learning, self-efficacy, and help seeking.

*The Adult Learner*

Adults learners face challenges that are unique and completely different from children. According to Knowles, Holton III, and Swanson (1998), there are at least four definitions of an adult. In the biological definition, an individual becomes an adult when he or she reaches an age when he or she is capable of reproducing. In the legal definition, an individual becomes an adult when he or she reaches an age when he or she can vote, drive, marry without consent, etc. In the social definition, an individual becomes an adult when he or she starts performing adult roles such as the worker, the spouse, the parent, etc. In the psychological definition, an individual becomes an adult when he or she arrives at a self-concept of being responsible for his or her life and is self-
directing. The psychological definition is the most crucial definition in terms of learning (Knowles et al., 1998).

The use of the word andragogy can be traced back to 1833, but Malcolm Knowles is usually credited for popularizing it. In the mid-1960's Knowles was exposed to the term andragogy by a Yugoslavian adult educator and Knowles states: "... it seemed to me to be a more adequate organizing concept – for it meant, as I understood it then, the art and science of helping adults learn" (Knowles, 1990, p.54). Andragogy then is a set of assumptions about how adults learn. According to Lindeman (1926) as cited by Knowles et al. (1998) these assumptions are:

1. Adults are motivated to learn as they experience needs and interests that learning will satisfy; therefore, these are the appropriate starting points for organizing adult learning activities.

2. Adults' orientation to learning is life-centered; therefore, the appropriate units for organizing adult learning are life situations, not subjects.

3. Experience is the richest resource for adults' learning; therefore the core methodology of adult education is the analysis of experience.
4. Adults have a deep need to be self-directing; therefore, the role of the teacher is to engage in a process of mutual inquiry with them rather than to transmit his or her knowledge to them and then evaluate their conformity to it.

5. Individual differences among people increase with age; therefore, adult education must make optimal provision for differences in style, time, place, and pace of learning (Knowles et al., 1998, p. 40).

Knowles et al. (1998) also argue that the strength of andragogy lies in the fact that it is a set of core learning principles which can be applied to all adult learning conditions or situations. The six core principles of andragogy are: "1) the learner's need to know, 2) self-concept of the learner, 3) prior experience of the learner, 4) readiness to learn, 5) orientation to learning, and 6) motivation to learn" (Knowles et al., 1998, p. 3). The online learning environment then should be one where the above assumptions and core principles are met.

**Online Learning**

In today's world, the constancy of change for those starting or maintaining a career is very real. Instead of
having careers, workers today negotiate contracts with a company to perform a set of tasks. Once those tasks are completed the worker either negotiates another contract with that company or with a different company. The way work is done is rapidly changing (Hiemstra, 1998).

Workplace transitions involve proactive employees who feel empowered to make any change a successful experience. What this trend will mean for the way we even plan for continuing education, training, and the various transitions in adult hood also is unclear, but it certainly means we must rethink much about the education of adults in the future and employ strategies that do empower people (Hiemstra, 1998, p. 2).

According to Dolence and Norris (1995), higher education must also be transformed by involving the community and also campus constituents in the process of change. This change in the workplace and the increasing need for continuing education for working adults leads to a change in the way education will be administered in the future. As working adults do not have the time or the money or the resources to drive many miles to attend regular classes at a university or college, the future of adult
education may very well lie in online courses (Dolence & Norris, 1995).

The online environment is a new environment that has evolved from computer conferencing.

Computer conferencing, a communication system for dispersed human groups was invented and implemented by Murray Turoff in 1970 .... Turoff designed conferencing to be a 'collective intelligence' environment, which would use the computer to structure human communication for information exchange and effective problem solving (Harasim, 1990, p. 41).

Educational computer conferencing emerged as a new phenomenon in the early 1980s. During the early years, it was approached from two traditional perspectives. It was approached either as an extension of distance education or a variation of face-to-face classroom learning. Neither of these approaches was adequate as the online environment is a place for educational interaction. "Online education is a unique expression of both existing and new attributes" (Harasim, 1990, p. 42). It is a place to exchange ideas. It involves people in ways that are different from other distance education programs like the technological form of the correspondence course or interactive television.
programs (White, 2000). It shares certain attributes with distance education and face-to-face classroom learning but it also involves new attributes. It is similar to distance education in that it is independent of time and place. It is similar to face-to-face learning in that it supports interactive group communication (Harasim, 1990).

Online learning is a different way of learning. It is about a new interface between student and content. It is about rethinking the role of the instructor – a guide or a sage? As such, the process, the experience, the interface, the roles of student and instructor, all differ from traditional classrooms (Siemens & Yurkiw, 2003, p. 123).

Online Learning Models

In an online environment, just as in a face-to-face environment, "learners’ needs are assessed; content is negotiated or prescribed; learning activities are orchestrated; and learning is assessed" (Anderson, 2004, p. 273). Here is where the similarity ends. The all-encompassing effect of the online medium creates a unique teaching and learning environment that has the capability of changing the time and place of the educational interaction. It also allows for the support of the content
in different formats such as multimedia, video, and text. The Internet provides huge repositories of content on every subject matter imaginable. Support in both asynchronous and synchronous modalities makes for a communications rich learning context (Anderson, 2004).

Asynchronous communication involves people interacting at different times. Computer conferencing or discussion forums are often used to facilitate asynchronous communication. Using tools such as e-mail, list-serves, and threaded discussion forums, asynchronous communication can be conducted between the facilitator and learners, and between learners. Synchronous communication involves people interacting in real time. An online 'lecture' or a telephone conversation is an example of synchronous communication. Using the Internet, people can communicate synchronously using Internet relay chat, real-time audio, application sharing or whiteboards, and computer video conferencing (Joliffe, Ritter, & Stevens, 2001, p. 57)

Two competing models of online learning advocate rationales for its effective application. The community of learning model, which evolved from telephone-based audio
(and later video) conferencing, is modeled both pedagogically and structurally on the campus classroom. It uses both synchronous and asynchronous communication to create the virtual classrooms. This model was developed by Garrison, Anderson, and Archer (2000). It claims that deep and meaningful learning occurs when there are adequate levels of cognitive, social, and teaching presences (Garrison, Anderson, and Archer, 2000).

"Cognitive presence concerns the construction of meaning and confirmation of understanding" (Garrison, Cleveland-Innes, & Fung, 2004, p. 63). This suggests that deep or meaningful learning can take place in an environment that allows for the development of critical thinking skills (Anderson, 2004). "Social presence encompasses the ability of participants to coalesce for a common purpose" (Garrison et al., 2004, p. 63). Social presence conveys a supportive environment where students feel comfortable and safe to express their ideas in a collaborative context. The absence of social presence leads to an inability to accept support and confirmation from peers and teacher. In creating an effective teaching presence, the teacher has to design and organize the learning experience, devise and implement activities to
facilitate communication between students, between the teacher and the student, and between students and content resources, and include subject matter expertise. (Anderson, 2004)

The second model is the independent study model. This model allows for independent learners to work on their own at their own pace. "This model maximizes flexibility, but it challenges the institution’s capacity to facilitate group social or collaborative learning activities" (Anderson, 2004, p. 278).

The Role of the Student

Learning online may be an overwhelming task for the students who are new to online learning and unaware that they would have to change their role from that of a student in a traditional face-to-face classroom to that of an online learner. Large numbers of online learners fail due to many reasons. Some of these reasons include poor course design, poor motivation, lack of applicability, barriers, etc. Often though, the failure is due to the fact that these learners were just not ready to become online learners (Piskurich, 2003).

Garrison et al. (2004) posit that the responsibilities and requirements of working online are not readily evident
to the students who are new to online learning. The adjustment to becoming an online learner involves the following:

- knowledge about, skill with, and acceptance of the technology
- new modes and amounts of communication with instructors, peers and administrators
- increased levels of learner self-direction, and
- a new 'place' for learning in time (anytime, usually determined by the learner and their life circumstances) and space (anywhere, dependent upon equipment requirements) (Garrison et al., 2004, p. 64).

The online learner has to assume considerable responsibility in constructing personal meaning. This is due to the asynchronous nature of the online community and the characteristic of the medium which allows for more freedom and yet can be confining.

The adjustment to online learner goes well beyond the technical skill adjustment. Online students must learn to communicate and become familiar with other members of the community through a medium without the visual
cues afforded in a face-to-face setting. The cognitive demands may well also increase as learners are expected to contribute ideas and share their thoughts, which are made permanent in the process. As this occurs, social identity will begin to change (Garrison et al., 2004, p. 64).

The Role of the Instructor

In an online environment that allows for flexibility and revision of content in situ, the instructor's role changes from that of the sole provider of knowledge to that of a consultant, guide, and resource provider. The instructor is no longer the provider of answers but provides structure for student learning and encourages self-direction in the students (Berge, 2000).

Hootstein (2002) equates the role of the instructor in an online environment to wearing four pairs of shoes. The online instructor is an instructor, first and foremost. This is the first pair of shoes. The second pair of shoes is that of a social director. The third pair of shoes is that of a program manager. The fourth pair of shoes is that of a technical assistant.
The first pair of shoes that an online instructor wears is that of an instructor. Hootstein (2002) advocates that an instructor's role in an online environment is consistent with seminal adult learning research in which instructors guide self-directed learning in problem-centered environments. E-learning facilitators don't hold all the answers. They offer their own unique insights as they help learners acquire knowledge and develop skills (Hootstein, 2002, ¶4).

In helping students become effective online learners, the online instructor has to foster learner-centeredness, structure problem-based learning, and provide informative feedback. The essential quality of learner-centeredness is most relevant when learners are personally challenged with a problem to solve, a project to complete, or a dilemma to resolve. In structuring problem-based learning, the instructor creates realistic experiences so that content becomes more personally meaningful for the students. This creates a highly authentic environment. Informative feedback has to be provided in a timely and personal manner. The feedback provided guides the students to improve their performance. Feedback is especially critical in an online environment as learners may feel isolated and
detached. Feedback may be given in the form of e-mail messages about the students assignments. Instructors may also post messages in a discussion forum or conference. In providing timely feedback, the instructors "should establish a standard such as a forty-eight hour turnaround time" (Hootstein, 2002, ¶ 11). Peer feedback should also be established as an expectation in guidelines posted at the beginning of a course (Hootstein, 2002).

The second pair of shoes that an online instructor wears is that of a social director. As a social director, the online instructor creates collaborative learning environments. The underlying belief here is that students learn best in social interactions. As such, the instructor should promote interpersonal relationships among the students and help them work together.

Therefore, the facilitators should begin a course by posting introductions and encouraging learners to seek areas of common interest as they meet in distinctive gathering places, such as chat rooms. Facilitators can encourage interaction among learners, facilitators, and subject-matter experts via the Internet using email, listservs, newsgroups, multi-user discussions
(MUDs), forums, instant messaging (IM), and conferencing (Hootstein, 2002, ¶ 14).

The third pair of shoes that an online instructor wears is that of a program manager. In this capacity, the online instructor is responsible for organizational, procedural, and administrative duties. The online instructor may develop study guides that provide information on both content and technical concerns. The online instructor should also help learners manage their time as "...many learners may not be accustomed to the increased independence and vast array of available information that e-learning provides" (Hootstein, 2002, ¶ 16).

The fourth pair of shoes that an online instructor wears is that of a technical assistant. Online instructors should possess adequate knowledge in using media and online communication tools in order to help online learners become comfortable with systems and software. A variety of media should be used to present content in order to accommodate individual learning styles. Text, graphics, audio, and video may be used in order to reach both visual and auditory learners (Hootstein, 2002).
As e-learning facilitators put on and take off the four different pairs of shoes that define their roles— instructor, social director, program manager, and technical assistant—they should keep these action items firmly in mind:

- address the needs of adult learners by guiding self-directed, realistic, problem-based learning experiences
- structure learning opportunities in which learners make their own meanings by discovering content on their own
- encourage high degrees of participation and interactivity
- offer prompt, informative feedback
- provide strong leadership
- help learners feel comfortable with technology (Hootstein, 2002 ¶ 19).

Instructors also need to adopt new approaches to their teaching. Simply stated, some pedagogical approaches that work in a traditional face-to-face classroom may not work in an online environment. One such new online approach is to use student self-assessments as a teaching tool.
Allowing students to move gradually from easy tasks to more difficult ones will expose them to what they ought to know. This process provides feedback without the worry of grades received until much later. This allows the instructor to move from summative assessment to formative assessment (Maeroff, 2003).

Formative testing reveals to students what they don't know and what they still have to learn, free of the pressure of grades and sanctions. Summative testing should come at the conclusion of the process, after students are satisfied that they have mastered the content. Unlike summative assessments with high stakes, formative assessments use tests to convey content and let students challenge themselves without the sanctions that might accompany failure (Maeroff, 2003, p. 37)

In a flexible online environment, instructors are also no longer restricted to the creation of colossal teaching packages that are not easily adapted to the needs of the students. Content can be negotiated to meet the needs of the individual learner. The design and organization of learning activities can occur concurrently with the progress of the course (Anderson, 2004).
However, within this flexibility, the need to stimulate, guide, and support learning remains. These tasks include the design of a series of learning activities that encourage independent study and community building, that deeply explore content knowledge, that provide frequent and diverse forms of formative assessment, and that respond to common and unique student needs and aspirations... (Anderson, 2004, p. 276)

Motivation

Many different definitions of motivation exist because of the complexity of human nature. According to one definition, "motivation is something that energizes, directs, and sustains behavior; it gets students moving, points them in a particular direction, and keeps them going" (Ormrod, 1998, p. 472). Ormrod further posits that students are motivated either intrinsically or extrinsically. Students who are intrinsically motivated are motivated by factors within themselves or in the task they are performing. These students may perform a task because it gives them pleasure or because it is important to them or because they learn a new skill or even because they think it is the ethically and morally right thing to do.
Extrinsically motivated students may perform a task because of factors that are external and unrelated to the task. They may perform a task for money, good grades, or even recognition or glory. Ormrod argues that intrinsic motivation is better than extrinsic motivation because these students are more likely to process information in effective ways such as by elaboration and visual imagery and by engaging in meaningful learning. Extrinsically motivated students will only perform easy tasks with very little classroom requirements. They may process information in a superficial manner. Some theorists have suggested that when self-efficacy and self-determination are present, then intrinsic motivation is more likely to emerge (Ormrod, 1998).

Wlodkowski (1999) defines motivation as why people behave the way they do. He argues that learning can be promoted among adults through culturally responsive teaching based on intrinsic motivation. He asserts that it is important to create a framework that links essential motivational conditions in such a way so as to be intrinsically motivating for individually unique adults in formal learning situations. From social science theories and research, the four motivational conditions that can
accentuate adult motivation to learn are inclusion, attitude, meaning, and competence (Wlodkowski, 1999).

Inclusion is the learners' awareness of being part of an environment where there is mutual respect between them and the instructor. There is also a feeling of connectedness. The atmosphere is one where learners feel safe, capable, and accepted. Attitude refers to the combination of concepts, information, and emotions that lead to favorable or unfavorable responses toward people, groups, ideas, events, or objects. Attitudes affect human behavior and help people make sense of their world. They help people feel safe when they encounter something that is new or unknown. Attitudes are also influenced by people's needs, as attitudes make attaining certain goals more or less desirable. Meaning refers to the value one places on the complexity of an experience or idea. Adults will not be motivated to learn if the learning experience is not meaningful to them. Their goals, interests, and perspectives have to be made the context of the learning situation. Competence is the desire to be effective. This is due to an innate need to relate adequately to the environment. Competence leads to a feeling of self-confidence and this in turn provides emotional support for
more extensive learning. It is important then to create a framework that combines these four conditions in a way that is intrinsically motivating for different adults (Wlodkowski, 1999).

Achievement Goal Theories of Motivation

One motivational framework that is critical in our understanding of academic learning and performance and which is closely linked to self-regulation is the achievement goal theories of motivation. These theories emphasize the active role of the learners in selecting, structuring, and interpreting their achievement experiences (Meece, 1994). The three predominant goal orientations in literature are the learning-focused goal orientation, the extrinsic-focused goal orientation, and the relative ability-focused goal orientation.

Each describes a different orientation that a learner may have toward a similar goal. For example, the goal might be to do well in a course, but this goal might mean different things to different learners – for instance, learning as much as one can, getting a good grade, or being the best-performing student in the class. Different achievement goal orientations have been shown to influence the kinds of cognitive
strategies that students report using. In addition, the classroom context can provide cues that affect which orientation a student adopts (Salisbury-Glennon, Young, & Stefanou, 2001, p. 3).

The learning-focused goal orientation involves learning for its own sake. The learners will choose challenging and meaningful tasks and will put effort into their work. They will also persist with difficult tasks (Salisbury-Glennon et al., 2001). This goal orientation is similar to intrinsic motivation and is positively related to self-regulated learning strategies (Salisbury-Glennon et al., 2001).

The extrinsic-focused goal orientation involves performing tasks for external rewards. This orientation is negatively related to self-regulated learning strategies as the learners are more interested in grades and scores than on learning (Salisbury-Glennon et al., 2001).

The relative ability-focused goal orientation involves comparing oneself to others in order to estimate one's performance. Outperforming others is the main source of motivation. This orientation is also negatively related to self-regulated learning strategies (Salisbury-Glennon et al., 2001).
Salisbury-Glennon et al. (2001) claim that most research on achievement goal theories of motivation support the fostering of a learning-focused goal orientation in the classroom. "Despite the volumes of research on student learning and motivation, however, there remains a paucity of research into what we can do as college and university faculty to foster the use of self-regulated strategies and motivation in our classrooms" (Salisbury-Glennon et al., 2001, p. 4)

*Self-Regulated Learning*

According to Long (2003), for adults to be successful online learners they have to be self-regulated.

Self-management and direction of learning by adults and children are referred to often as self-direction in learning, self-directed learning, and self-regulated learning. The adjectives in the above terms focus attention on the control of learning by the learner, rather than control by an external force. Self-responsibility is fundamental to self-directed learning in e-learning or any other kind of learning (Long, 2003, p. 5).

Learners usually do not accept responsibility in learning. This is due to the fact that since about 1850-1875, the
focus has been on the teacher's role in teaching and not on the learner's role in learning. Learners have been nurtured from childhood to expect learning to occur under the guidance of a teacher in a formal learning situation. Ironically, adults who usually prefer independence and freedom, expect the control of the teacher in an educational setting even though they may have had successful learning experiences outside of an educational setting without the control of a teacher.

This expectation seems to prevail, even though studies indicate that approximately 80 percent of what managers and professionals learn occurs as a result of learner self-direction (Graeve, 1987; Straka, Klienmann, & Stokl, 1994). That is, most of what they learn takes place beyond formal training or instructional environments (Long, 2003, p. 5).

As a consequence, in order for adults to become self-regulated learners, they must overcome their previous experiences in an educational setting that has given them no control over their own learning (Long, 2003).

Self-regulation theory focuses on "how students personally activate, alter, and sustain their learning
practices in specific contexts" (Zimmerman, 1986, p.307).

The students who are self-regulated are:

  metacognitively, motivationally, and behaviorally
active participants in their own learning process.

Metacognitively, self-regulated learners are persons
who plan, organize, self-instruct, self-monitor, and
self-evaluate at various stages during the learning
process. Motivationally, self-regulated learners
perceive themselves as competent, self-efficacious,
and autonomous. Behaviorally, self-regulated learners,
select, structure, and create environments that

According to Bandura (1977), self-regulation is the
ability to control one's own behavior and this is
attributed to personality. His social cognitive theory
views self-regulation as comprised of three steps: self-
observation, self-judgment, and self-reaction. When an
individual self-observes, he or she looks at his or her own
behavior and keeps tabs on it. When an individual judges,
he or she compares the behavior observed to a standard.
When an individual self-responses, he or she compares the
behavior observed with the standard and gives either
rewarding or punishing self-responses (Bandura, 1986).
According to Zimmerman (1989), the strategies that the students need for self-regulation are "self-evaluation, organizing, and transforming, goal-setting and planning, seeking information, keeping records and monitoring, environmental structuring, self consequating, rehearsing and memorizing, seeking social assistance, and reviewing records" (Hargis, 2000, p.2). Self-regulated learning is therefore a self-directive process that allows learners to convert their mental abilities into academic skills. Theoreticians agree that students who are self-regulating are the most effective learners. They are able to set goals for upgrading knowledge, develop learning strategies, monitor the effects of their engagement in the learning task, overcome obstacles by adjusting or abandoning initial goals, manage motivation and adapt and invent tactics for making progress. These students are aware of their knowledge, their beliefs, their motivation and their cognitive processes. This then enhances the perception of self-efficacy or control over the learning process (Hargis, 2000).

Niemi, Nevgi, and Virtanen (2003) conducted a study on students' self-regulatory skills in a Web-based higher education learning environment. A new interactive Web-based
tool, the IQ Learn, was developed for the study. The IQ Learn can be downloaded from http://www.edu.helsinki.fi/iqform/ and consists of the following three components:

1. The interactive test bank, with three questionnaire sets for students' self-evaluation...

2. Tutoring sets, with a hypertext structure for each subcomponent of the tests:
   - Tutoring students towards self-regulation.
   - Additional guidelines for teachers.

3. A learning diary for the reflection of learners' experiences and test profiles.

The IQ Learn was developed to increase the learners' self-knowledge and to evaluate and develop the learners' self-regulatory and learning skills. The theoretical framework of Niemi et al.'s IQ Learn study (2003) was based on the notion that self-regulated learning consists of the following subprocesses: Forethought, Performance or Volitional Control and Self-reflection (Pintrich, 2000; Zimmerman, 2000).
Forethought consists of cognitive and motivational orientations. Students can monitor and control their learning using cognitive and motivational management strategies. They also have the capacity to manage external resources (e.g. time, social interaction and help seeking). Self-regulated learning requires an awareness of reflective processes, where a learner assesses his/her own acts and achievements (Niemi et al., 2003, p. 50).

Data was collected from five universities in Finland from 256 respondents consisting of 127 male students and 126 female students. The 21 to 24 year-old first and second year students came from five different fields of study, namely, Humanities and Art, Social and Behavioural Sciences, Teacher Education, Technology and Science, and Agriculture and Forestry...Most of the students reported having good study motivation and were satisfied with their major. Most of the students (60%) also said that they had been proceeding well in their studies (Niemi et al., 2003, p. 52).

In phase one of the study, data was collected in the form of questionnaires. Students were given questionnaires
on demographic information, the tutorial help that they received during their studies, and the Metacognitive Learning Strategies section of Pintrich, Smith, Garcia and McKeachie's (1991) Motivated Strategies for Learning Questionnaire (MSLQ). The results indicated that

...students who received more tutorial guidance used more advanced learning strategies than students who had received less or no tutorial guidance. Students with a higher study motivation used learning strategies more efficiently...Students with high study motivation reflect on their own learning, and this may help them maintain their study motivation (Niemi et al., 2003, p. 52).

In phase two, the same data was used to validate the self-regulative dimensions for the interactive self-evaluation tests that were created for the study. After the validation process, three tests of self-regulated learning emerged. The first test was the Forethought of Learning test. This consisted of five items, namely, expectations of success, performance anxiety, task value and self-efficacy. The second test was the Strategies in Learning test. This consisted of five items, namely, time management, self-management, persistency, and help-seeking strategies. The
third test was the Learning Skills test. This test consisted of seven items, namely, rehearsal, critical thinking, finding essential points, connecting newer and older knowledge, keywords and advance organizers, application of theories, and self-assessment (Niemi et al., 2003).

In phase three, the use of IQ Learn was evaluated. IQ Learn was created using all the information from phase one and two. All the components of each test were connected to a tutoring set. Data was collected on students' use of the IQ Learn tool in Spring and Autumn of 2002 (Niemi et al., 2003).

The findings indicated that "...the IQ Learn tool is the most useful for students who have difficulties in learning or who do not have stable learning strategies and skills, or who are at an early stage of their university studies" (Niemi et al., 2003, p. 65). The findings also indicated that the IQ Learn tool was more beneficial for the younger students as it provided them with information about their learning strategies. The older students reported that they did not learn anything new. The IQ Learn was also more beneficial when the instructor or tutor provided concrete assignments on how to use the tool or
guided them towards self-reflection and self-evaluation. In conclusion, Niemi et al. (2003) argue that tutoring in self-regulation is necessary in higher education as there is very little guidance on study skills and learning strategies on campuses and virtual environments (Niemi et al., 2003).

Winne and Stockley (1998) believe that "today's and the near future's computing technologies, appropriately coupled with other educational innovations, can increase the efficacy, efficiency, and extent of students' self-regulated learning" (p. 108). Self-regulated learning strategies are crucial for learners who have to solve problems in a new domain or environment. In novel situations where students have to learn to use computers, new software, and information technologies, the cognitive skills and strategies used by expert learners will help them overcome any obstacles in their path and solve any problems that arise (Ropp, 2003). Highly self-regulated learners are better able to take advantage of such an environment (Niemi et al., 2003).

Self-Efficacy

Self-efficacy is an important component of motivation. "Perceived self-efficacy is defined as people's beliefs
about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave" (Bandura, 1994, ¶ 1). In the educational context, self-efficacy is an important variable in understanding student behavior (Schunk, 1989).

Bandura (1977) asserts that self-efficacy beliefs can influence the choices that an individual makes. This then affects the course of action that he or she follows. Individuals have a tendency to select tasks that they are comfortable in doing and competent in accomplishing (Pajares, 2002).

Zimmerman (1989) postulates that the self-efficacy beliefs of the students can "affect their manipulation and choice of learning environments" (p. 331). Zimmerman (1985) reports that changing the self-efficacy beliefs of elementary students resulted in a change in the students' choice of learning tasks. Rewards for self-efficacy led to an improvement in the students perceptions of efficacy. This, in turn, increased the students' free choice and value ratings of the task (Zimmerman, 1985).
Self-efficacy beliefs also determine the amount of effort an individual will expend on a task, the length of perseverance expended when faced with obstacles (Bandura, 1977; Pajares, 2002), and the level of resilience in the face of adversity (Pajares, 2002).

The higher the sense of self-efficacy, the greater the effort, persistence and resilience. People with a strong sense of personal competence approach difficult tasks as challenges to be mastered rather than as threats to be avoided. They have greater intrinsic interest and deep engrossment in activities, set themselves challenging goals and maintain strong commitment to them, and heighten and sustain their efforts in the face of failure. Moreover, they more quickly recover their sense of efficacy after failures or setbacks, and attribute failure to insufficient effort or deficient knowledge and skills that are acquirable (Pajares, 2002, ¶ 7).

Self-efficacy also has an effect on a person's thought patterns and emotional reactions. Individuals with high self-efficacy will be calm when approaching difficult tasks and activities. Individuals with low self-efficacy may believe that things are more difficult than they really
are. This belief will cause anxiety, stress, and depression when faced with challenging tasks. This will cause them to fail to solve the problem. Self-efficacy then can influence an individual's level of achievement. This is a type of self-fulfilling prophecy (Pajares, 2002).

That is, the perseverance associated with high self-efficacy is likely to lead to increased performance, which, in turn, raises one's sense of efficacy and spirit, whereas the giving-in associated with low self-efficacy helps ensure the very failure that further lowers confidence and morale (Pajares, 2002, ¶ 8).

**Literature on Helping**

Until the late 1970s, research on helping has focused mainly on potential helpers and not on the help seekers. Gross and McMullen (1983) argue that

...in order to understand helping relationships and to design effective and humane helping systems, theory and research must take into account the psychology of the help-recipient....A number of helper-oriented papers have asked why people help for no obvious gain (altruism), and why they occasionally turn their backs on victims (bystander apathy), but few questions have
been asked about why people do not avail themselves of useful services, or why they sometimes do not ask for what they want or need even when costs appear minimal and resources are readily available. This last question is all the more puzzling and interesting because it implies that needy people often behave counter to their own self-interests (p. 46).

According to Gross and McMullen (1983) many explanations have been offered to account for altruism. Only recently however, has theory focused on help recipients and why they either seek help or avoid it.

According to Brickman, Rabinowitz, Karuza, Coates, Cohn, and Kidder (1982), there are basically two distinct bodies of literature on helping. One is in social psychology and the other is in clinical psychology. In social psychology, the literature on helping focuses on “... when people try to help, on material or instrumental aid as the critical form of help, and on help in short-term relationships or experimental situations” (Brickman et al., 1982, p. 368). In clinical psychology, the literature on helping focuses on “... when attempts to help produce changes in recipients, on instruction and emotional support
as the critical forms of help, and on help in long-term or ongoing relationships” (Brickman et al., 1982, p. 368).

Brickman, et al. (1982) believe that:

(1) a general theory of helping and coping must build a bridge between these two literatures; (2) the critical factor on which such a bridge must be built concerns the form people’s behavior takes once they decide to help; and (3) the critical determinants of the form of their behavior are their attributions of responsibility for problems and solutions (p. 368).

The reason the two literatures have remained separate is that they view helping as taking different forms. In social psychology, helping is inhibited by the experimental situation. If the response is donating money, then the help sought is restricted to this and nothing else. In clinical psychology, helping is determined by professional training and institutional context (Brickman et al., 1982). In this case study, helping was investigated in an educational setting. It was therefore not inhibited by the experimental situation as in social psychology nor was it determined by professional training and institutional context as in clinical psychology. It was based on student behavior in seeking help and the reaction to that behavior in the help
giver. The success or failure of such a behavior in producing the desired results in the help seeker and in the help provider may depend on how each perceives the problem and its solution.

Models of Helping

In order to understand the perspectives of help seekers and help providers in terms of whether the help seeker feels responsible for his or her problem and for solving the problem, let us look at some models of helping.

Latane and Darley (1970) developed a simple model based on answers to some questions. The helper has to answer yes to the following questions before deciding to help.

1. Does the victim have a problem that my help will alleviate?
2. Am I responsible for helping? (Should I help?)
3. Am I capable of successfully rendering aid (Gross & McMullen, 1983, p. 47)?

The help seeker has to ask the following questions before seeking help.

1. Do I have a problem that help will alleviate?
2. Should I ask for help?
3. Who is most capable of providing the kind of aid I need (Gross & McMullen, 1983, p. 47)?

Gross and McMullen (1983) developed a model that consists of three general stages. These stages are the perception of a problem, the decision to seek help, and strategies and tactics for seeking help. These three stages are similar to Latane and Darley's (1970) three-question model.

Brickman et al. (1982) developed four models of helping. These models vary in terms of the degree to which the help seeker feels he or she is responsible for the problem and its solution. The four models are the moral model, the medical model, the compensatory model, and the enlightenment model (Brickman et al., 1982).

The Moral Model

In the moral model, the help seeker is responsible for the problem and the solution as this model adheres to the moral teachings that the individuals who work hard are rewarded (Cohn, 1983). The name moral model indicates "that others feel neither obligated to help (since everyone's troubles are of their own making) nor capable of helping (since everyone must find their own solutions)" (Brickman et al., 1982, p. 370). As an illustration, in a moral model
drinking is considered a sign of weakness. The drinkers have to control themselves in order to be sober (Brickman et al., 1982).

The general characteristics of the moral model are:
(1) Recipients in this model describe themselves as stubborn, lazy, and lacking effort. (2) They need short-term help. (3) They expect helpers to be peers who will give them the proper motivation in terms of exhortations. (4) They expect themselves to be strong and to strive to get themselves together and discover where they personally want to go (Cohn, 1983, p. 50).

The fault lies with the individual and the helping that takes place in this model consists of reminding people that they are responsible for their own actions and that they have to help themselves. The value of this model is that it forces people to take an indisputable stance towards their lives. They are responsible for changing their lives if they do not like it (Brickman et al., 1982).

The Medical Model

In the medical model, the help seeker is not responsible for the problem or the solution. This model is therefore exactly opposite the moral model. The name medical model can be attributed to the fact that the
"medical profession does not hold its patients responsible for their medical problems or solutions" (Cohn, 1983, p. 51). The medical model however refers not only to people with diseases but also to all people who are subject to forces beyond their control. The Skinnerian view of determinism, which views human behavior as determined by rewards and punishments, is also part of this model (Brickman et al., 1982).

The general characteristics of the medical model are:
(1) These recipients perceive themselves as ill; (2) the expected duration of treatment varies depending on the nature of the problem; (3) they believe that they need treatment and service provided by experts who are trained to recognize the problem and to provide the service or treatment needed; and (4) the recipients believe that they should accept the diagnosis of the experts and follow their orders (Cohn, 1983, p. 52).

The advantage of this model is that it allows people to seek and accept help without being blamed for being weak as they are not responsible. The disadvantage of this model is that it fosters dependency. This dependency will deter people from doing something they once could do well. Recipients of help under this model will not question
inadequate or coercive interventions as they do not believe that they can solve the problem themselves (Brickman et al., 1982).

The Compensatory Model

The compensatory model is a mix of the moral and the medical model. In this model, the help seeker is not responsible for the problem (medical model) but is responsible for the solution (moral model). The name compensatory model comes from the fact that the recipients feel that they need to compensate for their problems which they are not responsible for. They cope by trying to find a solution (Cohn, 1983).

The general characteristics of the compensatory model are:

(1) people describe themselves as deprived and needing someone like a tutor to help them.; (2) they need help to be given for only a fixed, temporary time period; (3) they expect helpers to be peers or subordinates who ask recipients how they can be useful, instead of telling them what to do; and (4) recipients expect themselves to be assertive and to receive training to compensate for the handicaps imposed by the environment (Cohn, 1983, p.54).
The advantage of this model is that the recipients are looking into the future by actively seeking solutions and not looking into the past by blaming themselves for the problem. They are not fixated on the problem. The disadvantage of this model is that very high expectations are placed on the recipients as they are responsible for the solutions. They are placed in a highly stressful situation as they do not receive compliments for their successes but they are responsible for their failures (Brickman et al., 1982).

The Enlightenment Model

In the enlightenment model, the recipients are responsible for the problem but not the solution. This model is therefore exactly opposite the compensatory model. The name enlightenment model comes from the fact that the recipients may not recognize that they are responsible for the problem. They are taught that they are responsible and therefore must learn to control their behaviors (Cohn, 1983). The central emphasis then is on enlightening the recipients as to the nature of their problems. The recipients have to see themselves as guilty or sinful. Since the solution is provided by another person or a group, the solution can only be maintained as long as they
have a relationship with this person or group (Brickman et al., 1982).

The general characteristics of the enlightenment model are:

(1) people describe themselves as guilty or sinful, (2) they need help to be given for a long indefinite period of time, (3) they expect helpers to be authorities who will provide them with discipline, and (4) they expect themselves to submit to the authorities and to control their bad impulses (Cohn, 1983, p.55).

The advantage of this model for the recipient is that they do not have to take responsibility for the solution. They accept the solution provided for them by the authorities in the group. Their problem is solved as long as they do not repeat their previous negative behaviors. The disadvantage of this model is that people become so totally obsessed with following the dictates of the group that they exclude all other aspects of their lives and so may lose friends (Cohn, 1983).

To test the models in a real-world setting, Rabinowitz (1978) conducted a study for her dissertation. To test the
moral model, 12 erhard seminars training (est)\textsuperscript{1} graduates were interviewed. To test the enlightenment model, 12 members of a national evangelical group (Campus Crusade for Christ) were interviewed. To test the compensatory model, 12 participants in a job training program (Comprehensive Employment and Training Act) were interviewed. To test the medical model, 12 college students in the waiting room of an infirmary in a college were interviewed. She found that the est participants and the members of the national evangelical group described themselves as being more responsible for their problems than the other two groups whereas the participants in the job training program and the est participants described themselves as being more responsible for finding solutions to their problems than the other two groups. This was consistent with the assumptions of the four models described above (Rabinowitz, 1978).

Brickman et al. (1982) believe that "[t]he very label help implies that recipients are not responsible for solving a problem (as in the medical or the enlightenment

\textsuperscript{1}Werner Erhard founded erhard seminar training (est) in 1971. It was well known for training people to get "It" which is a version of Zen created by Alan Watts. Alan Watts taught people to "Get It" to small groups and mainly through books whereas Erhard taught people to "Get It" to hundreds in large hotel ballrooms. This program no longer exists (Carroll, 2002).
models) and that help givers are" (p. 37). This means that the individual who deserves help is not responsible for his or her problems. This also implies that the individual is not in control and hence is not responsible for finding a solution.

When people fail to distinguish between attribution of responsibility for a problem and for a solution, they must choose between two unsatisfactory alternatives, holding actors responsible for both problems and solutions and thus not giving help; or holding actors responsible for neither problems nor solutions and giving help on terms that undermine actors' sense of competence and control and their ability to make effective use of the help itself (p. 376).

Brickman et al. (1982) prefer the compensatory model as they believe that this is the only model that solves the dilemma of helping as the compensatory model does not hold the individual responsible for the problem but does hold them responsible for finding the solution. As a consequence, the recipients have to actively seek solutions and this gives them a sense of control over their lives (Brickman et al., 1982).
A study conducted by Duncan (2003) investigated the psychological help seeking behavior of black male college students. One hundred and thirty one black male undergraduate and graduate students from two predominantly White Midwestern universities and two historically Black universities participated in the study. Forty-six of the students were freshmen, 33 were sophomores, 32 were juniors, 10 were seniors, and 10 were graduate students. Thirty-one percent of the students came from the lower class, 67% came from the middle class, and 2% came from the upper class. A demographic questionnaire, Terrell and Terrell's (1981) Cultural Mistrust Inventory (CMI), Baldwin and Bell's (1982) African Self-Consciousness Scale (ASC), and Fischer and Turner's (1970) Attitude Toward Seeking Professional Psychological Help (ATSPPH) were used. It was found that African American men who are older and of lower SES had a more positive attitude toward seeking counseling. This may be due to the fact that they ...have lived longer and have had more experience dealing with personal problems and institutional barriers and value the idea of talking though problems with trained counselors. They may also have had more
experience with confronting problems that are beyond their ability to solve and would welcome the input and expertise from trained mental health professionals (Duncan, 2003, p. 80).

The findings also indicated that African American men with higher cultural mistrust had less positive attitudes toward seeking counseling. This supports the notion that predisposed attitudes have an impact on whether psychological help is sought (Duncan, 2003).

Kaukinen (2002) conducted a study on male and female violent crime victims' decisions to seek help. Data on violent crime victims were taken from the Personal Risk section of the 1993 Canadian General Social Survey (CGSS). The CGSS gathered information on various types of reporting and help-seeking strategies used by crime victims. Respondents who identified themselves as having been the victim of a violent crime were asked whether they reported the incident to the police. Among CGSS victims, 23% reported their victimizations to the police...Respondents were also asked if they sought help from another person and/or organization. Among the CGSS victims, 29% had engaged in some type of nonlegal help seeking. The list of help sources
included family, friends, victim/help agencies, or unspecified others. Among the CGSS victims, 11% sought help from friends, 7% sought help from family, and 4% sought help from a victim or social services agency (Kaukinen, 2002, p. 438).

Ten thousand three hundred and eighty-five men and women 15 years of age and older from 10 Canadian provinces (excluding Yukon and the Northwest Territories) were selected through the telephone by random-digit dialing. The participants then were interviewed. The first stage of the study explored the direct effects of gender and the victim-offender relationship on police reporting. The second stage of the study explored the "direct and conditional effect of gender and the victim-offender relationship across a three category help-seeking measure" (Kaukinen, 2002, p. 441). The three help-seeking strategies are police reporting, alternative help seeking, and no help seeking. The findings indicated that police reporting could not be predicted from the gender of the victims and the victim-offender relationship. The findings also indicated that ... men are half as likely as women to report to the police rather than to not seek help ... and men are two and a half times more likely than women to report
to the police relative to seeking help from
alternative sources .... Women are more likely than
men to use alternative help seeking relative to not
seeking help (Kaukinen, 2002, pp. 444-446).

Women attacked by known offenders are also more likely to
seek alternative help as compared to not seeking help and
are less likely to report to the police. They are more
likely to seek help from family, friends, and social
services agencies. Men attacked by strangers are the least
likely to seek alternative help. Sexual assault victims
were less likely to report to the police whereas the use of
weapons by the attacker increased the likelihood of the
crime being reported to the police. Older victims, victims
of higher social rank, and victims who are employed were
also more likely to report to the police than not seek help
(Kaukinen, 2002).

Spilsbury (2002) conducted a study on how children's
fears about their safety in their neighborhoods can affect
their help seeking behavior. The participants consisted of
60 children between the ages of 7 and 11 in Cleveland,
Ohio. These children were from five neighborhoods with
different levels of crime and violence. Participation was
voluntary and parents' consent was obtained. Data was
collected through a walking tour of the child's neighborhood. The children were asked to show the researcher what was in the neighborhood. The children wore a small back pack that had a tape recorder. A small microphone was clipped to the children's shirts or jackets. The children were given three scenarios that they might come across in the neighborhood: "(1) being accosted by a bully; (2) being seriously injured after falling down or falling off a bicycle; and (3) having parents argue heatedly" (Spilsbury, 2002, p. 105). A follow-up interview with 58 of the children was conducted 10 days after the walk to obtain additional data. The findings revealed two similarities between children of low violence and high violence neighborhoods. The first similarity was the fear of and exposure to violence. The children were afraid of being abducted, assaulted, stalked, or raped in their respective neighborhoods. Many of the children had also seen some form of violence or weapons. The second similarity was that the children's concerns for their safety shaped their help seeking behavior. Some of the strategies that the children used included asking for help from someone they knew, not letting strangers help, asking
for help from 'safer' people (women versus men), and limiting assistance from strangers.

Help Seeking in a Learning Environment

According to Rosen (1983), learners will frequently judge themselves as not able to overcome the increasingly more difficult tasks that they have to deal with in college. In a 1988 study conducted by Karabenick and Knapp, all the college students in the study reported that they could have used help during the term with their courses or study skills. However, many students did not seek the help that they needed. Ryan, Hicks, and Midgley (1997) believe that the students' academic and social goals may be related to their avoidance of help seeking. Help seeking is different from the other strategies of self-regulation as it involves other people, and so, is both a learning strategy and a social interaction (Ryan et al., 1997; Cheong, Pajares, & Oberman, 2004). Help seeking in the classroom is also a public behavior. Students may fear that seeking help in the classroom may affect how others view them (Ryan et al., 1997). Help seeking is avoided as it is perceived to be a threat to self-worth (Ryan & Pintrich, 1997).
Nelson-Le Gall (1981) differentiates between two types of help seeking behavior in children. Instrumental help seeking involves children asking for hints so that they can solve the problems themselves. This is a deep level cognitive processing strategy (Arbreton, 1998). Instrumental help seeking is therefore mastery oriented (Nelson-Le Gall & Glor-Scheib, 1985). Executive help seeking, on the other hand, involves children asking for help in order to complete the task quickly. This is a passive approach to problem solving and involves surface level cognitive processing strategies. The intention is to get someone else to solve the problem (Arbreton, 1998). Executive help seeking is therefore dependency oriented (Nelson-Le Gall & Glor-Scheib, 1985).

According to Nelson Le-Gall, Gumerman, and Scott-Jones (1983), instrumental help-seeking behaviors develop early in the child's life. This is due to the fact that children by their very nature require help to satisfy their needs. They are not able to solve many problems on their own. As a consequence, the help seeking behaviors of children represent an adaptive approach to solving problems. It also shows that the child is showing initiative in trying to
solve the problem instead of abandoning it or persevering unsuccessfully without help (Nelson Le-Gall et al., 1983).

Newman and Schwager (1995) argue that some of the help seeking strategies of students may be detrimental to learning. This occurs when students ask for help immediately without attempting to solve the problem on their own first. It is important to encourage these students to differentiate between help seeking behavior that can aid learning (instrumental) and help seeking behavior that allows the learner to be totally dependent on the helper (executive) (Newman & Schwager, 1995).

According to Nadler (1991), individuals usually do not seek the help that they need. This is because seeking help entails "instrumental benefits and psychological costs. From an instrumental perspective, seeking outside assistance often is important for easing suffering or for further task completion. However, relying on outside help may threaten a person's feelings of independence and competence" (p. 290).

designed three studies to investigate the help seeking behavior of college students. Direct observation of help-seeking behavior between students and between students and teacher is not possible in a college classroom as these interactions are rare. Most of the help-seeking behavior occurs outside the college classroom. As a consequence, the researchers relied on "students' self-reports of level of need, their likelihood of help seeking given the existence of need, and the incidence of help seeking itself" (p.222).

The first study looked at the relationship between help seeking and the behavior of students when they are faced with poor performance in an educational setting. "Conceived as an instrumental rather than a dependent activity in this context, academic help seeking was expected to vary directly with other goal-oriented achievement behavior" (Karabenick & Knapp, 1991, p.222). The results from the first study indicated that there was a link between seeking help and intentions to be involved in instrumental achievement activities. The researchers also found a difference between informal help seeking (i.e., seeking help from informal sources such as friends, other students, etc.) and formal help seeking (i.e. seeking help from formal sources such as the instructor of the class,
support services provided by the school, asking questions in class, etc.). Students sought more instrumental help from formal sources than informal sources. Informal help seeking was also linked to lowering aspirations and altering one's goals whereas formal help seeking was not. A direct relationship was also found between self-esteem and instrumental help seeking. Students with high self-esteem were more likely to seek help when it was needed whereas students with low self-esteem were more threatened by having to seek help and so they avoided it. The relationship between self-esteem and help seeking then can be described in terms of vulnerability rather than consistency (Karabenick & Knapp, 1991). "The vulnerability hypothesis proposes that the need for help is most threatening at low levels of performance, self-esteem, or achievement" (Ryan et al., 1997, p. 155).

The principle of vulnerability assumes that individuals with low self-esteem are more threatened by having to seek help and are therefore less likely to do so than are people with high self-esteem. Consistency predicts the reverse, that information inconsistent with one's existing self-concept is threatening. Because seeking help implies inadequacy,
it is more inconsistent, and therefore more threatening, to individuals with high self-esteem than to individuals with low self-esteem. Consistency thus predicts an inverse relationship between help seeking and persistent self-esteem. (Karabenick & Knapp, 1991, p. 222)

The second study looked at behavior that was closely linked to the learning process. The learning strategies were cognitive strategies such as rehearsal, elaboration, and organization, metacognition, and resource management strategies such as time, study environment, and self or effort. The researchers expected the students to use these learning strategies as the use of such learning strategies reflects an active, instrumental approach to learning. The results from the second study indicated that students who used more learning strategies were more likely to seek help when needed. Students who used more learning strategies also had less need for help. Students who manage their time were also more likely to seek help. Students who used fewer strategies had a greater need for assistance but these students were less likely to seek help (Karabenick & Knapp, 1991).
The third study looked at the relationship between help seeking and threat to self-esteem. "If students less likely to use learning strategies are also those who are more threatened by seeking help, then threat may be the link between help seeking and strategy use" (Karabenick & Knapp, 1991, p. 222). The results from the third study indicated that students who use more learning strategies are also less concerned with the negative consequences of seeking help. The use of learning strategies was also more strongly related to instrumental help seeking than executive help seeking (Karabenick & Knapp, 1991).

The overall results from these three studies indicate that learners who are active seek help when it is needed. "This is true whether we measure active learning in terms of students' likely instrumental responses to lower-than-desired performance (Study 1) or by the extent to which students use learning strategies (Studies 2 and 3)" (Karabenick & Knapp, 1991, p. 229). The results also support vulnerability as the relationship between self-esteem and help seeking. Students with lower self esteem are more threatened by help seeking (Karabenick & Knapp, 1991).

People lose self-esteem if they believe they have behaved in a manner that does not meet their own internal standards. Negative reactions and negative evaluations made by others may effect loss of self-esteem but are not necessary to experience loss of self-esteem. Embarrassment is a special kind of loss of self-esteem that occurs because people believe others are evaluating them negatively. This violates their own internal standards for people generally desire to be viewed positively by others. Loss of general self-esteem involves self evaluations, whereas embarrassment involves perceptions of public evaluations (pp. 144-145).

According to Modigliani (1968) people with high self-esteem are less likely to be embarrassed than people with low self-esteem as people with low self-esteem are more likely to accept and be disturbed by the evaluation of others. People with low self-esteem will avoid the possibility of embarrassment by not seeking help. This supports the vulnerability hypothesis (Shapiro, 1983).
Help Seeking and Motivation

A study conducted by Cheong et al. (2004) investigated the relationship of academic motivation to executive and instrumental help seeking. The participants consisted of 314 (250 boys, 64 girls) students from 4 private schools and 5 public schools. The students were in grades 8 to 12 and were enrolled in elective computer science classes. The motivation variables consisted of "computer science self-efficacy, computer science self-concept, achievement goals in computer science, self-efficacy for self-regulation, and value of computer science" (p. 7). The results indicated that a task goal orientation was beneficial to help seeking. "Task goals were positively associated with instrumental help seeking and with perceived benefits of help-seeking, and they were negatively associated with executive help-seeking" (p. 10). Avoiding help seeking was positively related to a performance-avoid goal orientation. Performance-avoid goal orientation means that the reason for getting involved in the task was trying not to look incompetent. This was negatively related to seeking instrumental help. There was no relationship between self-efficacy and avoidance of help seeking. The findings from this study show the importance of achievement goal
orientations. Task goal orientation was positively associated with instrumental help seeking and negatively associated with executive help seeking (Cheong et al., 2004).

Newman and Schwager (1995) conducted a study to investigate the help seeking behaviors of 118 third and sixth graders in three middle-class elementary schools in an urban area of southern California. The three schools "were ethnically diverse, with approximately 60% White, 30% Hispanic (predominately Mexican-American), 5% Black, and 5% Asian-American students each" (Newman & Schwager, 1995, p. 357). The study investigated only two of three conditions considered necessary for adaptive help seeking. Help seeking is considered adaptive under three conditions (Newman, 1994; Newman & Schwager, 1992).

The first is the extent to which help seeking is necessary. The second is the extent to which the content of help seeking is appropriate to the task at hand. The third is the extent to which the target or the person to whom the request is made is appropriate to the task at hand. The study under discussion kept the second condition (i.e., the target) constant by ensuring that the students could only request help from the adult experimenter/tutor. The study
also looked at the grade level, the academic goals of the students, the prior math achievement of the students, and the interactional context of the learning environment. The researchers believed that all these factors contributed to adaptive help seeking. Grade level was considered important as older students are more aware of the need for help and the type of help needed to solve a particular problem. Older students are also able to distinguish between effective and ineffective helpers and have better communication strategies in order to seek help. These students also seek help more often than younger students when the original solution is found to be incorrect. Academic goals were considered important as these goals are conceptualized as learning versus performance goals by the students. Learning goals are considered intrinsic and involve the mastery of a task whereas performance goals are considered extrinsic and involve the avoidance of challenge and getting good grades. When students seek performance goals they will avoid help seeking as it is considered an admission of inadequacy. Prior math achievement was considered important as knowledge or expertise is associated with sophisticated information seeking. Interactional context was considered important as the
classroom environment, i.e., "the activity structure, classroom goal orientation, and dynamics of interpersonal relations" (Newman & Schwager, 1995, p. 356), can have an impact on adaptive help seeking (Newman & Schwager, 1995).

These students who were high, medium, and low math achievers were given math problems and they were encouraged to seek help. The students were divided into two groups. They worked under one of two academic goal conditions. One group worked under learning goals and the other group worked under performance goals. The results indicated that there were differences in the help seeking behaviors of the students according to the students’ grade level, academic goals and achievement level. Sixth graders asked for more process related hints and were less likely just to ask for the answers. Students given learning goals viewed errors as a natural part of the learning process and sought feedback to debug and self-correct their work. Students who were given performance goals concentrated on completing as many problems as possible and comparing their results with their peers. Their help seeking behavior was hence geared towards this goal and as a consequence was maladaptive or non-inquisitive. Low achievers in the performance goal group also solved significantly fewer problems than low achievers.
in the learning goal group. The consequence of prior math achievement on help seeking was that low achievers requested more process-related information than high achievers and this can be considered adaptive help seeking. This is counter to the fact that students who are low achievers are less competent and hence are less mature help seekers. However, in this case, less competence was associated with greater need and hence with adaptive help seeking (Newman & Schwager, 1995).

From the above study, it can be concluded that help seeking that fuses with learning goals can be viewed as “an adaptive means for using environmental resources to achieve future independence” (Newman & Schwager, 1995, p.353). Help seeking that fuses with performance goals can be viewed as negative as it implies dependence on others. Help seeking that is considered positive and adaptive is a strategy of self-regulated learning. This study, therefore, provides support for the use of tutoring in the classroom where learning goals are emphasized over performance goals (Newman & Schwager, 1995).

Help Seeking and Self-Regulated Learning

Many students are passive in the face of difficult academic tasks and have a tendency to give up prematurely.
Other students exhibit active engagement in certain classroom activities while remaining passive in others. Yet other students remain actively engaged in difficult academic tasks. What accounts for the differences in the behaviors of these students? Newman (2002) believes that how students deal with difficult academic tasks depends on many factors, including “(a) how the child has been socialized over the years and (b) how he or she is presently being taught in the classroom” (p. 132). He looked at how elementary and middle-school teachers can help their students be adaptive help seekers when faced with academic tasks that they cannot solve on their own. Adaptive help seeking refers to the seeking of help from others in order to learn independently and not for the mere purpose of obtaining an answer (Newman, 2002). This concept is similar to Nelson-Le Gall's (1981) instrumental help seeking.

When students monitor their academic performance, show awareness of difficulty they cannot overcome on their own and exhibit the wherewithal and self-determination to remedy that difficulty by requesting assistance from a more knowledgeable individual, they are exhibiting mature, strategic behavior. Help seeking
can avert possible failure, maintain engagement, lead to task success, and increase the likelihood of long-term mastery and autonomous learning. Indeed, adaptive help seeking is a strategy of self-regulated learning” (Newman, 2002, p.132).

Newman (2002) believes that students who are self-regulated have a “tool kit” (p.132) that allows them to deal with academic challenge. These students are able to use the right strategies at the right time. For adaptive help seeking to occur, the students need to have cognitive competencies, social competencies, personal motivational resources, and contextual motivational resources. Cognitive competencies allow the students to know when help is necessary, to know that other people can help them, and to know how to ask the questions that will provide them with the appropriate answer. Social competencies allow the students to know whom to ask for help and how to request help in a socially acceptable way. Personal motivational resources refer to the personal goals, beliefs, and feelings connected to tolerance for task difficulty and to the readiness to ask others for help. Contextual motivational resources refer to classroom factors that contribute to help seeking such as “goals, grading systems,

Newman (2002) argues that three components of self-system theory underlie self-regulated learning. These components are relatedness, autonomy, and competence. Children have a need to: first, feel that others care about their well-being; second, feel they are in charge of their own actions; and third, feel competent. Self-perceptions of relatedness, autonomy, and competence influence the degree to which children regulate their own learning. Thus, socializers need to provide children with involvement (e.g., nurturance and affective closeness), support for autonomy (e.g., encouragement of independence), and support for competence (e.g., lessons that instill a sense of competence and an understanding that academic success is contingent on competence) (Newman, 2002, p. 133).

He further argues that teachers can help students become self-regulated by satisfying the three needs mentioned above so that students will become adaptive help seekers. The involvement of the teacher is important in adaptive help seeking because of teacher-student intersubjectivity, “i.e. attunement of teachers’ and students’ purpose, focus, and affect” (p. 133), and
students’ personal beliefs. Teacher-student intersubjectivity can be established when the teacher is perceived to be caring and able to take the perspective of the student, and based on this understanding, guide the student’s learning. Lines of communication are then open to the students and these teachers listen, ask questions, and help their students in non-threatening ways. This is especially beneficial for low achievers as they usually have poor self-perceptions and low self-esteem. Help provided in a non-threatening manner by a caring teacher can help these low achievers overcome their reluctance to seek help. The students’ personal beliefs about help seeking can also affect their help seeking behavior in a classroom. According to Newman and Schwager (1993), preschoolers, kindergartners, and first graders ask their teachers for help because of the global traits of the teacher, i.e., the teachers are perceived as nice and kind. As children grow older, they become aware that the teacher can meet their needs in additional ways (Newman & Schwager, 1993). These students not only have positive views of help seeking, but they also fear negative reactions. They become afraid that the teacher might think that they are dumb if they ask questions or ask for help (Newman & Goldin, 1990).
Help Seeking and Gender

Research on help seeking and gender have yielded mixed results. Some epidemiological research indicate that females seek more help than males (Nadler, 1991; Ryan & Hicks, 1997). Cheong et al. (2004) found that girls sought more instrumental help than boys. Girls also perceived greater benefits of help seeking than boys. Other research report no such gender differences (Newman, 1990; Ryan & Pintrich, 1997).

Taplin et al., (2001) conducted a study that investigated the help seeking strategies of 712 (343 male and 369 female) high achieving and low achieving distance education students from various courses at the Open University of Hong Kong (OUHK). Gender was considered as one of the major independent variables in the study as it has been identified as a factor that affects students' performance (Fan & Chan, 1997). Data were collected through face-to-face interviews and telephone interviews. The results indicated that when students were asked if they believed that help seeking was a useful strategy, no significant differences in gender and achievement groups were found. Both the high achievers (men and women) and low achievers (men and women) rated help seeking between 3
(occasionally) and 4 (often) as a good way to learn. When the students were asked if they formed voluntary study groups as a help seeking strategy, there was a significant difference between gender and achievement. Sixteen percent of the high-achieving women formed study groups, whereas only 9% of the low-achieving women and 9% of the high-achieving men formed such groups. When the students were asked about the types of problems for which they sought help, no significant difference was found between help seeking and achievement.

In both high-achieving and low-achieving groups the largest numbers of students said they had sought help for problems related to new study materials (77% and 73% respectively), followed by test and examination anxiety (54% and 50%). Similar numbers said that they sought help for problems relating to volume of materials (46% and 48%) and integration of their studies with their other duties and responsibilities (46% and 48%). In the high achievers' group the next three were spending time with family, friends and colleagues (43%), writing skills (42%), and self-motivation (38%), whereas the order for the low achievers was writing skills (42%), then self-
motivation (37%). Finding time to study was the problem about which the least number of students in either group sought help (30% and 26%) (Taplin et al., 2001, p. 62).

As no significant difference in achievement was found between the high achievers and the low achievers, a comparison then was made between genders without considering achievement. The results indicated that more women than men sought help for various problems. More men than women said that they did not seek help for writing skills and test or examination anxiety (Taplin et al., 2001).

In terms of whom they asked for help, the highest percentage of students who asked family or friends for help on all problems, except new course materials, was the high-achieving women. For problems with new course material, the majority of these women asked the tutor. After family and friends, the high-achieving women asked fellow students for help on all problems, except writing skills and integrating duties. For help with writing skills, these women asked the tutor. For help with integrating duties, they asked either fellow students or the tutor.
The highest percentage of low-achieving women asked family or friends for help on all problems except new course materials and writing skills. They asked the tutor for help on these. The second largest percentage of the low-achieving women asked fellow students for help on all problems.

The highest percentage of the high-achieving men asked family or friends for help with self-motivation and finding time to spend with others. For new course materials, volume of materials, and writing skills, these men asked the tutor for help. For help with test and examination anxiety, they asked fellow students. These men asked either family, friends or tutors for help with integrating duties.

As for the low-achieving men, they asked family or friends for help with self-motivation. For new course materials, volume of materials, integration of duties, and writing skills, these men asked the tutor for help. For test and examination anxiety, they asked fellow students for help (Taplin et al., 2001).

Help Seeking and Computer Privacy

Computers can be a source of privacy in help seeking. It allows the individuals to fail in private. "The decreased cost of failure, in terms of embarrassment,
shame, or humiliation makes it more likely that people will feel less inhibited, try new techniques and different strategies - in general, be more flexible" (Karabenick & Knapp, 1988, 461). As a result, help obtained through the computer can eliminate public embarrassment, which is a threat to self-esteem, and the main reason why people in need of help do not seek it.

A study conducted by Karabenick and Knapp (1988) compared computer and interpersonal help seeking. The subjects consisted of 28 students taking an introductory psychology course. The 16 male and 12 female students were equally divided and randomly assigned to two conditions, i.e., computer help or interpersonal help. The students were informed that interpersonal help could be obtained through the computer. They were led to believe that a person at another terminal would provide the help they needed in the form of a message received on their computer. In actual fact, a computer system returned programmed responses to those individuals seeking interpersonal help. In order to make it appear that the students were interacting with a real person, "delays were used to simulate the actual timeframe for transmission of a message
by a person at another terminal. This took approximately 20 seconds" (pp. 463-464).

The students were asked to perform a task on a microcomputer. The task was made difficult enough to produce failure. A joystick was used instead of a keyboard to reduce anxiety that can sometimes accompany the use of a keyboard. "The joystick moved a character (an "X") around the screen and selections were made by pressing the "fire" button" (Karabenick & Knapp, 1988, p. 463). The task consisted of identifying the correct concept by selecting stimuli that reflected that concept. "The performance series consisted of four trials (concepts) with five guesses to identify the correct concept on each trial" (Karabenick & Knapp, 1988, p. 463).

After each incorrect guess, the students could ask for help. For computer help, the students moved the X to the appropriate location. The help response appeared immediately in a message at the bottom of the screen. For interpersonal help, the students again moved the X to the appropriate location. The help response took longer this time (20 seconds) because help was supposed to come from another person at another computer.
The results indicated that the students "in the computer help condition considered help to be more beneficial than did those in the interpersonal condition" (Karabenick & Knapp, 1988, p. 467). Thirty-six percent of the students in the interpersonal condition sought help at least once whereas 86% of the students in the computer help condition sought help at least once. The students were also asked to provide reasons for why help was sought. The reasons given in order of importance were:

1. It was smart to do so when help was needed
2. Help was necessary to solve the concepts
3. The task was not solvable without getting some help
4. More problems could be solved with help than without

(Karabenick & Knapp, 1988, p. 469)

For those students who did not seek help, the following reasons were given in order of importance:

1. They are the type of people who like to do things by themselves
2. Not thinking that they really needed help
3. Thinking that it would take longer to finish the task if help was obtained
4. Not wanting anybody to find out that they needed help
5. Thinking that they would feel bad if they needed to ask for help (Karabenick & Knapp, 1988, p. 469)

The results of this study indicate that the difference in the help seeking behavior of the students depending on the source of assistance shows that computers can play an important role in the help seeking process. When failure is likely, the potential for privacy in help-seeking provided by a computer can increase help-seeking tendencies. This orientation toward seeking help would appear to be desirable in those performance environments where productivity losses would occur if individuals failed to take advantage of available resources. Therefore, it is suggested that designers of computer environments increase their systems' capacities for computer rather than interpersonal assistance. Furthermore, designers of networks should be sensitive to the inhibiting impact that monitoring of help-seeking on those systems might produce (Karabenick & Knapp, 1988, p. 469).

**Summary**

As there is no theoretical perspective in help seeking that is widely accepted, this research used grounded
theory. As such, the theoretical background for this literature review was based on the interconnected areas of the adult learner, online learning, motivation, self-regulated learning, self-efficacy, and help seeking. Adults are self-directed in their learning and this lends well to the online learning environment. Online learning is a different way of learning that has a new interface (electronic) between students and content. The roles of the instructor and students change in such an environment. As there is no face-to-face contact between the instructor and students, online learners have to be motivated. One motivational framework that is critical in our understanding of academic learning and performance, and which is closely linked to self-regulation, is the achievement goal theories of motivation. These theories emphasize the active role of the learners in selecting, structuring, and interpreting their achievement experiences (Meece, 1994).

As the focus of this research is on help seeking, helping and help seeking in various contexts were discussed in detail. Some of the areas that this research investigated were the two distinct bodies of literature on helping; the different models of helping; help seeking in a
learning environment; help seeking and motivation; help seeking and self-regulated learning; help seeking and gender; and help seeking and computer privacy. Nelson-Le Gall (1981) differentiates between two types of help seeking behavior in children. Instrumental help seeking involves children asking for hints so that they can solve the problems themselves. This is an active approach to problem solving. Executive help seeking, on the other hand, involves children asking for help in order to complete the task quickly. This is a passive approach to problem solving (Nelson-Le Gall, 1981).

Most of the variables in the studies cited and discussed under one subheading overlapped with variables under other subheadings. As such, there was no clear delineation between the subheadings as one study discussed under one subheading, for instance, Help Seeking and Motivation could very well be discussed under Help Seeking and Self-Regulated Learning. Nonetheless, the subheadings were necessary for purposes of highlighting the different variables under consideration in this study. The literature review was ongoing in that the data collected provided further direction for additional literature review.
CHAPTER THREE

Methodology

A case study is an empirical inquiry that investigates in detail an individual, a group, a setting, an event, a single depository of documents, a phenomena, or other bounded systems (Bogden & Biklen, 1998; Sturman, 1999; McMillan, 2004). A case study can consist of a within-site or single-site study or a single case study where a single entity is examined in detail. It can also consist of a multi-site or multi-case study that investigates multiple sites or cases (Bogdan & Biklen, 1998; McMillan, 2004). A bounded case study may be restricted by time and place. Multiple sources of evidence are used in order to enhance the validity of the conclusions. The results of case studies are generalizable to theoretical propositions and not to populations (Yin, 1984).

The purpose of this research was to investigate the help seeking behavior of college students taking an online class at a large residential Midwestern university. Qualitative research in the form of a single-site embedded case study formed the methodological framework of this research.
The research questions addressed in this study were:

1. What types of help are sought, from whom help is sought, and when is help sought in an online environment.

2. What is the relationship of self-esteem to help seeking in an online environment.

3. What is the relationship of self-regulated learning to an online learning environment

This chapter describes the research methods used to address these questions and includes a description of the theoretical framework, the research design, data collection procedures, and data analysis.

Theoretical Framework

As help seeking is a phenomenon that can be found in many different contexts (DePaulo, 1983) and there is no theoretical perspective in help seeking that is widely accepted (Nelson-Le Gall, 1985), the theoretical framework for this research is based on grounded theory. A case study is an ideal methodology for grounding theory (Sturman, 1999). Glaser and Strauss (1967), argue that the general goal of grounded theory is to construct theories from qualitative data in order to understand phenomena. "In discovering theory, one generates conceptual categories or
their properties from evidence; then the evidence from which the category emerged is used to illustrate the concept" (p. 23). Haig (2001) views grounded theory as a general theory of scientific method that detects and explains phenomena. "To this end, grounded theory is reconstructed as a problem-oriented endeavor in which theories are abductively generated from robust data patterns, elaborated through the construction of plausible models, and justified in terms of their explanatory coherence" (¶ 4). Kinach (2001) argues that grounded theory is a relatively new phenomenon in educational research. Grounded theory has emerged in education because of the two divergent views of teaching that drive research on teaching. One view of teaching is that it is a science that needs laws (process-product). The second view of teaching is that it is interpretation in search of meanings (grounded theory) (Kinach, 2001).

Research Design

Single case studies may be undertaken for critical test of existing theory, for investigating a rare or unique event, or for revelatory purposes. Multi-case studies may be undertaken to investigate similar results (a literal replication) or contrary results (a theoretical
replication). Case studies may be holistic or embedded. A holistic design investigates the global nature of the phenomena under study. An embedded design investigates the subunits of the phenomena under study. "When an embedded design is used, each individual case study may in fact include the collection and analysis of highly quantitative data, including the use of surveys within each case" (Yin, 1984, p. 53). This research study used a single-case embedded design.

The Participants

The participants for this study consisted of 28 undergraduate students taking an online Technology Applications in Education course offered within the College of Education of a Midwestern university. Twenty-three of the students were female and five were male. Nine of the students were Sophomores, twelve were Juniors, and seven were Seniors. Twenty-one of the students were from the College of Education, three were from the College of Fine Arts, and four were from the College of Health and Human Services. Of those students within the College of Education, four students majored in Early Childhood Education, four students majored in Middle Childhood Education, eleven students majored in Adolescent/Young
Adult Programs, and two students majored in Intervention Specialist Education. Of those students within the College of Fine Arts, one student majored in Art Education, one student majored in Printmaking, and one student majored in General Art. Of those students within the College of Health and Human Services, three students majored in Physical Education and one student majored in Early Childhood Education.

It is also important to note that the students were residential students who lived on campus or near the campus. All the students were full-time students.

Initially, only 27 students had agreed to participate in this case study. Even though one student had decided not to participate, she still handed in the weekly journals to the researcher every week. After reviewing the insightful answers given by that student, the researcher approached her at the end of the quarter and asked her permission to include her answers in the case study. She gave both verbal and written permission. The student however, did not have time to be interviewed. As a result, only 27 students were interviewed.
The Online Course

The Technology Applications in Education course provided these college students with computer competency to enhance classroom instruction in their respective areas of specialization. This course introduced students to a wide variety of technology uses. Students became proficient in using word processing and presentation software. Students learned how to create databases and spreadsheets, and to use software such as KidPix and HyperStudio. The students also created a Web page, using FrontPage (or other Web building software), that included technology information from their respective fields of study. The International Society for Technology in Education (ISTE) Standards for Teachers formed the basis for instruction in the course. Students had to complete twelve assignments throughout the quarter. There was a mid-term exam and a final project which consisted of an electronic portfolio which they had to burn onto a CD-R or a CD-RW.

The required text for the class was Teachers Discovering Computers: Integrating Technology in the Classroom by Gary B. Shelly, Thomas J. Cashman, Randolph E. Gunter, and Glenda A. Gunter. This book teaches future educators how to integrate technology into their K-12
classrooms. Special emphasis is placed on how to use computers, access information on the Web, and evaluate Web-based content. This text has a companion Web site which provides exercises, activities, and games on all the eight chapters in the book.

Links to tutorials on the Internet were also provided for each of the twelve assignments. Some of the links were provided in the assignment sheets whereas other links were provided under the Course Document section and the External Links section on Blackboard 5.0.

The Procedure

At the beginning of the quarter, students were given consent forms (see Appendix A) to sign in compliance with the requirements of the university's Institutional Review Board (see Appendix B). According to Bogden and Biklen (1998) the two issues that are most important in research are informed consent and protection from harm. This is to ensure that the students enter the research voluntarily, knowing what the research is about, and that they understand that they will be protected from harm. In order to further protect the students, their names were not used.

Students were given a demographic questionnaire at the beginning of the quarter. The purpose of the questionnaire
is to obtain background information on the students and their level of computer literacy (see Appendix C).

Students were also given two standardized tests at the beginning of the quarter. Students were informed that there are no right or wrong answers. The first test was Good-L and Good-K's (n.d.) *A Measure of Self-Esteem* (see Appendix D). This is a 27-item true-false test to measure the students' level of self-esteem. The scale is for an adult population. The purpose of the standardized test was to investigate any relationship between self-esteem and the help seeking behavior of the students.

The second test was Pintrich, Smith, Garcia and McKeachie's (1991) *Motivated Strategies for Learning Questionnaire* (MSLQ) (see Appendix E). This is an 81 item, 7-point Likert scale test. The 81 items are grouped into 15 scales. 31 items deal with motivation, 31 items deal with learning strategies, and 19 items deal with student management of different resources. This entire test took about 25 minutes to complete. The purpose of the MSLQ was to investigate any relationship between self-regulated learning and the online learning environment.

All the students participating in the study were informed that they were required to keep a weekly journal
to be sent to the researcher via e-mail every Monday. The researcher provided a template in the form of a Microsoft Word document. The students filled in the information in the template (see Appendix F). They were asked to write down the number of hours they spent on their assignments that week, their level of frustration in trying to complete an assignment, the exact moment when they decided to seek help (how much time they had spent on the assignment before seeking help), from whom help was sought, and whether it was a pleasant and successful experience.

The student participants were also interviewed during the last three weeks of the quarter for about 45 minutes (See Appendix G). Standardized open-ended interviews were conducted to ensure that respondents answered the same questions in the same order. This increases the comparability of the responses and ensures that data is collected on the main topics (Tuckman, 1972).

Two focus groups were conducted at the end of the quarter. Six to ten respondents were randomly selected and the focus groups lasted between 1 to 1 ½ hours. The first focus group had ten students. The second focus group had seven students. The focus groups were video-taped. The
focus groups were conducted to further explore topics and themes unearthed in the interviews and the weekly journals.

The Pilot Study

The researcher conducted a pilot study in Spring 2003 on help sought in an online class at a large residential Midwestern university. The online class was conducted using a Web-based management software called Blackboard. In 1999, the university adopted Blackboard in an effort to provide a Web-based course management tool to support the traditional face-to-face classroom. Blackboard is a product of Washington D.C.-based Blackboard Inc.

Blackboard offers a complete suite of enterprise software products and services that power a total "e-Education Infrastructure" for schools, colleges, universities, and other education providers. Blackboard solutions deliver the promise of the Internet for online teaching and learning, campus communities, auxiliary services, and integration of Web-enabled student services and back office systems.

(Blackboard, 2003, ¶ 2)

The setting.

The pilot study was conducted at a residential Midwestern university. During the time of data collection,
the main campus had 16,854 undergraduate students. One thousand one hundred and twenty-five of these were international students. The main campus had 846 full-time faculty and the student to faculty ratio was 20:1.

The participants.

The participants consisted of 25 undergraduate students in the College of Education. Of the 23 students who responded to the question that asked them if they were Freshmen, Sophomores, Juniors, or Seniors, 9 of the students said they were Sophomores, 9 were Juniors, and 2 were Seniors. Three of the participants did not provide an answer. Twenty of the students were female and 5 were male. They were informed that their participation or non-participation in the study would not reflect on their grades for the online course.

The researcher.

The researcher was an observer for the course and created an online tutorial on how to create a Web page using Microsoft FrontPage.

The procedure.

The class instructor and the researcher met with the students on the first day of class in order to establish rapport and to introduce the researcher. The students were
informed that they would receive questions from the researcher as an e-mail attachment every other week and that they would be given points for sending in their responses.

Data collection procedures.

Data was collected throughout the Spring quarter in the form of e-mail responses to the questions posed by the researcher. Four sets of questions were given to the students periodically throughout the semester.

Data analysis.

Data analysis occurred throughout the quarter. Each set of data, which were received in electronic form as e-mail attachments, were printed and analyzed by the researcher before the next set of questions were given to the students. This ongoing data analysis process allowed the researcher to form questions based on the responses given by the students.

The first set of questions asked them the following:

1. How many hours they were taking that quarter.
2. Why they decided to take an online course.
3. If they had ever used Blackboard before in other classes and to specify the ones they had taken if they remembered.
4. If they had a computer or access to one at home or in the dorm and if they did not, where they went.

5. If they encountered any problems with Blackboard and if they did, to specify what they were and how they solved them.

6. If they encountered any problems not related to Blackboard (for example: problems with their computer, problems with their assignments, etc.) and to specify the problems and how they solved them.

7. How much time they spent on the computer daily in classwork and in personal use; what they did on the computer (classwork, check e-mail, chat with friends, surf the Internet, download games, download music, build web pages, other).

8. How much time they spent on the computer working on their assignment for the class that week.

The second set of questions asked them the following:

1. If they had any problems with their assignments that week and, if they had, to specify what they were and how they solved them.

2. If they had any problems communicating with their instructors that week and, if they had, to specify what they were and how they solved them.
3. If they asked anyone for help in completing their assignments that week if they did, to specify who it was and what the problem was.

4. If they encountered any problems with Blackboard that week and if they did, to specify what the problems were and how they solved them.

5. If they encountered any other problems not related to Blackboard that week (for example: problems with their computer, difficulty finding materials on the Internet, etc.) and if they did to specify what they problems were and how they solved them.

6. How much time they spent on the computer working on their assignments for the class that week; how much time they spent on the computer daily; and what they did (for example: check e-mail, chat with friends, surf the Internet, etc.).

The third set of questions asked the students the following:

1. If they had any problems with their assignments that week and, if they had, to specify what they were and how they solved them.
2. If they asked anyone for help in completing their assignments and, if they had, to specify who it was and what the problem was.

3. If they encountered any problems with Blackboard that week and, if they did, to specify what the problems were and how they solved them.

4. If they encountered any other problems not related to Blackboard that week (for example: problems with their computer, difficulty finding materials on the Internet, etc.) and, if they did, to specify what the problems were and how they solved them.

5. If they went to the Help forum in Blackboard and, if they had, what they did (for example: read questions, comments, and replies and/or post a question.

The fourth set of questions asked the students the following:

1. How they planned their time to read and complete assignments in that class; whether they planned their time on a daily basis, on a weekly basis, or other and to specify what they meant by other.

2. How difficult it was to do the Web page using FrontPage.
3. If they looked at the FrontPage tutorial developed by the researcher and, if they had, if it was helpful and why or why not.

4. If they had used the PowerPoint tutorial on "How to Upload your Web page" (in the Course Documents) to upload their Web page and why or why not.

5. If in the last three weeks, they had gone to the Help forum in Blackboard and if they had, what they did there; whether they read the questions, comments and replies or whether they posted a question.

6. If they thought the Help forum was useful and why or why not.

7. If they were a sophomore, a junior, a senior, or other and to specify what they meant by other.

Some of the questions were repetitions of questions that had been asked before. The students were informed that this could occur as the researcher wanted to find out if there were any changes in their answers over time. Two weeks before the third set of questions were given to the students, a Help forum was created by the researcher on the Discussion Board in Blackboard 5.0. The students were informed of this and were given directions on how to use the Help forum. They were informed that this Help forum was
solely for their benefit and that they could ask each other for help.

Results.

The first set.

The first set of questions covered the period from March 31 to April 5. Twenty-four respondents out of a possible 25 handed in (via e-mail) their first set of questions. Data from the first question in the first set of questions revealed that out of the 24 respondents, 2 or 8.33% were taking 13 hours, 2 or 8.33% were taking 15 hours, 5 or 20.83% were taking 16 hours, 2 or 8.33% were taking 17 hours, 3 or 12.50% were taking 18 hours, 4 or 16.67% were taking 19 hours, 4 or 16.67% were taking 20 hours, and 2 or 8.33% were taking 21 hours. This shows that the majority of the students (91.67%) were taking more than 15 hours that quarter.

Data from the second question revealed that the reasons given for taking an online class were as follows. Eleven respondents or 45.83% said that taking an online class fit their schedule. One or 4.17% said that he or she had never taken one and wanted to see what it would be like. One or 4.17% said that she took the class because of a recommendation from a friend who had taken the class the
quarter before. One or 4.17% said, "I decided to take the online course so I could have enough time to take five classes during spring quarter in order to graduate on time and not be behind." One or 4.17% said that she wanted a change and thought that this would be a good class to take as she is used to working with computers. Nine or 37.50% said that they took the online class because they were independent or preferred to work on their own or preferred to work at their own pace. This shows that the majority of the students (45.83%) took the class because it fit their schedule. As one respondent aptly said, "I wanted to take the class but with having a full schedule already, taking it online was the best option, because then I could do the work when I had time."

Data from the third question revealed that out of the 24 respondents, all 24 or 100% said that they had used Blackboard before in other classes. This means that they were all familiar with the software and knew how to use it.

Data from the fourth question revealed that 22 out of the 24 respondents or 91.67% said that they had a computer or access to one at home or in their dorm rooms. One of the 2 respondents who did not have a computer said that he or she used the computer either at the computer lab in the
College of Education or the library. The second respondent said that he or she had a computer but that there was a problem with the monitor and he or she was in the process of getting it fixed. In the meantime, he or she used a friend's computer.

Data from the fifth question revealed that only 2 respondents or 8.33% said that they had encountered problems with Blackboard 5.0. When asked what the problems were and how they solved them, one of the respondents said, "Last quarter sometimes we would have problems being able to open things up, but we would just email the professor and she would fix the problem." The other respondent who had problems said, "Some of the announcements the the professors sent out did not get to the class, but the professors were understanding if at least a few of the students had trouble." This shows that the problems the two respondents had were minor. The first respondent had actually referred to another class taken the quarter before. The problem that the second respondent had did not affect his or her classwork or grades.

Data from the sixth question revealed that 8 respondents or 33.33% had encountered problems not related to Blackboard 5.0. One respondent said that he or she did
not understand the assignment and had to send constant e-mails to the instructor until his or her questions were answered. Another respondent said that the problem was due to unfamiliarity with the software.

I had a little trouble with Microsoft Publisher because I had never used it before and was not familiar with working with the layouts. In order to solve my problem I had a friend who was knowledgeable with computers clear up some concerns I had.

Yet another respondent said that his or her assignment "messed up" when he or she tried to save it as a Web page and he or she fixed it by moving things around. Another said that he or she had problems with the computer when running too many programs at once. It would shut down. The respondent was also frustrated with the university Web site as it "just does not like to work correctly". One respondent said:

I am not familiar with all computer programs and ran into problems with them in the lab and at home. At home I called friends or talked to my roommate. While at the computer lab, I asked Professor ... for help. Both ways helped me to figure out the problems.
Not having the programs needed for the assignments was a problem encountered by one of the respondents. He or she solved the problem by getting the programs and downloading them onto his or her computer or he or she went either to the computer lab at the College of Education or the computer lab at the library. Another respondent went to the computer lab to read his or her e-mail but was not able to do so the whole day. The last respondent said that his or her computer sometimes had trouble reading e-mail attachments. This respondent had to go the computer lab in the library to read them. This shows that the 8 respondents all had different problems but they all managed to solve their problems.

Data from the seventh question revealed that the number of hours spent on the computer daily on classwork were as follows. One respondent or 4.17% said that he or she spent 0 hours on the computer daily. Five or 20.83% said that they spent 1 hour. One or 4.17% revealed that he or she spent 1.5 hours on the computer. Three or 12.50% spent between 1 to 2 hours. One or 4.17% spent between 1 to 3 hours. Five or 20.83% said that they spent 2 hours. One or 4.17% spent between 2 to 4 hours. Two or 8.33% spent 3
hours daily. One spent 3.5 hours. One spent between 3 to 4 hours. Two spent 5 hours and one spent 7 hours.

Out of the 24 respondents who answered the above question, only 23 responded to the question that asked them the number of hours spent on the computer daily in personal use. One or 4.35% responded that he or she used the computer daily in personal use for 15 minutes. One used it for 20 minutes. Four or 17.39% used it for 30 minutes. Six or 26.09% used it for 1 hour. Two or 8.70% used it between 1 to 3 hours. Four used it for 2 hours. Two respondents used it for 3 hours. One respondent used it for 4 hours while another used it for 8 hours. One respondent said, "Well, since I have unlimited internet access and I use instant messenger to communicate with my family and friends back home my computer is usually on most of the day, so a lot of hours." The following table provides a comparison of the respondents and their answers to the question on how many hours they spent on the computer daily for classwork and for personal use.
Table 1

*Time Spent on the Computer on a Daily Basis (March 31 – April 6)*

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Classwork (Hours)</th>
<th>In Personal Use (Hours)</th>
<th>Total (Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1 – 3</td>
<td>1 – 3</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>0.5</td>
<td>2.5</td>
</tr>
<tr>
<td>7</td>
<td>2 – 4</td>
<td>1 – 3</td>
<td>3 – 7</td>
</tr>
<tr>
<td>8</td>
<td>1.5</td>
<td>0.5</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>1 – 2</td>
<td>2</td>
<td>3 – 4</td>
</tr>
<tr>
<td>11</td>
<td>1 – 2</td>
<td>1</td>
<td>2 – 3</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>1 – 3</td>
<td>0.33</td>
<td>1.33 – 3.33</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>3.5</td>
<td>4</td>
<td>7.5</td>
</tr>
</tbody>
</table>
Table 1 (continued)

*Time Spent on the Computer on a Daily Basis (March 31 – April 6)*

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Classwork (Hours)</th>
<th>In Personal Use (Hours)</th>
<th>Total (Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>0.25</td>
<td>1.25</td>
</tr>
<tr>
<td>19</td>
<td>1 – 2</td>
<td>1</td>
<td>2 – 3</td>
</tr>
<tr>
<td>20</td>
<td>3 – 4</td>
<td>1</td>
<td>4 – 5</td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>A lot</td>
<td>&gt;2</td>
</tr>
<tr>
<td>23</td>
<td>3</td>
<td>No answer</td>
<td>3</td>
</tr>
<tr>
<td>24</td>
<td>2</td>
<td>0.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

The eighth question asked them what they did. The respondents were given eight choices to select from. The data is tabulated in the table above:
Table 2

Daily Activity on the Computer When Choices were Given

(March 31 – April 6)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classwork</td>
<td>24</td>
<td>100%</td>
</tr>
<tr>
<td>Check e-mail</td>
<td>24</td>
<td>100%</td>
</tr>
<tr>
<td>Chat with friends</td>
<td>17</td>
<td>70.83%</td>
</tr>
<tr>
<td>Surf the Internet</td>
<td>18</td>
<td>75%</td>
</tr>
<tr>
<td>Download games</td>
<td>1</td>
<td>4.17%</td>
</tr>
<tr>
<td>Download music</td>
<td>13</td>
<td>54.17%</td>
</tr>
<tr>
<td>Build web pages</td>
<td>1</td>
<td>4.17%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>3</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

One of the 3 respondents who selected 'Other' said that she used the computer for job hunting. "Right now I have been job hunting and filling out applications". Another respondent said, "I check my online banking and I check my cell phone minutes on that web page." The last respondent
said that he used the computer for "updates to Student Senate site" and "communications for UPAC committee".

Data from the ninth question revealed the majority of the respondents, i.e., 15 respondents or 62.50%, spent 4 or more hours on the computer working on their class assignments for that week. Only 9 respondents spent less than 4 hours. Refer to the following chart for the detailed information.
The second set.

The second set of questions were given out for the period from April 7 to April 13. All 25 respondents handed in their second set of questions (via e-mail). Data from the first question in the fourth set of questions revealed that out of the 25 respondents, 11 or 44% said that they had problems with their assignments that week. Seven of the
respondents said that they had problems looking for the required Web sites. They said the following:

1. I had trouble locating the sites relevant to the topics for assignment 5, I corrected this by searching more and trying to fit the description as best as possible.

2. I had problems finding appropriate websites for assignment 4 and 5. I asked a few people in the class to help me out and they did.

3. Finding websites for Assignment #5 and finding enough time to complete the assignments along with my other three classes.

4. It was hard to find all of the websites at first, but it helped when Dr.... emailed all of us and told us what to search under.

5. I had trouble finding certain websites on certain topics. So, I emailed Dr.... and scheduled office hours with her to go over the questions that I had.

6. I haven't yet solved the problem...I need to find two more websites to write about but I'm having trouble so I'll keep looking.

7. My problem that I had was trying to find websites for assignment 5c, to solve the problem I emailed
Prof.... and she gave some suggestions for finding sites, such as using minority use of technology and gender and technology.

Two of the respondents said that they had difficulty finding time to complete the assignment.

1. I was surprised at how time consuming #5 was...I hadn't planned on that. I simply rearranged my time a bit.

2. I had trouble finding time for the assignment #5 because I was very busy this past week.

One respondent had difficulty with saving the assignment in the required format. "I had trouble saving my newsletter as a web page, so I just turned it in as it was". One respondent had difficulty with his or her e-mail account. "I did not receive the checking up questions till past the due date because there is something wrong with my ... account. On Monday I am going to call someone to figure out how I can fix it".

Data from the second question revealed that only one respondent or 4% had had problems communicating with the instructors during that week. This respondent said, "The email problem has been a communication barrier for the past week."
Data from the third question revealed that 6 respondents or 24% asked someone for help in completing their assignments that week. One respondent replied that she asked "them" without revealing who "them" was. "I asked them what kind of words they used for the searches that we had to do for assignment 4 and 5. I couldn't find the proper websites that the assignment was asking for." One respondent asked his girlfriend. Another asked a friend from the class who had already asked the professor the same question. Yet another respondent asked a friend from the class. One asked a student who lived down the hall from him or her as the student had taken the class the quarter before. The final respondent revealed that he or she asked the instructor via e-mail.

Data from the fourth question revealed that 6 respondents or 24% had communicated online with the other students in the class. In selecting the responses to the question "If yes, what do you talk about?", 4 respondents said that they talked about assignments only, 1 talked about both assignments and grades, and 1 selected other and talked about discussion questions online.
Data from the fifth question revealed that none of the 25 respondents had encountered any problems with Blackboard 5.0 that week.

Data from the sixth question revealed that 15 respondents or 60% had encountered problems not related to Blackboard 5.0. Eleven respondents had difficulty finding the appropriate Web sites. Two of the respondents had difficulty with their e-mail accounts. Two respondents had difficulty finding the time to complete the assignments.

Data from the seventh question that asked how much time they spent on the computer working on their assignment for the class that week revealed the following:
Table 3

Time Spent on the Computer on Class Assignment (April 7 – April 13)

<table>
<thead>
<tr>
<th>Time</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>3 hours</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>4.5 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>4 to 5 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>5 hours</td>
<td>4</td>
<td>16%</td>
</tr>
<tr>
<td>6 hours</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>7 hours</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>7 to 8 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>8 hours</td>
<td>3</td>
<td>12%</td>
</tr>
<tr>
<td>8 to 9 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>8 to 10 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>9 hours</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>9 to 10 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>10 to 12 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>12 to 15 hours</td>
<td>1</td>
<td>4%</td>
</tr>
</tbody>
</table>
One respondent simply said, "A lot! It has been quite difficult to finish all of the assignments for this class and my other 3 classes."

Data from the eighth question that asked how much time the respondents spent on the computer daily revealed the following:
Table 4

*Time Spent on the Computer Daily (April 7 – April 13)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 2 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>0.5 to 2 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>1 hour</td>
<td>4</td>
<td>16%</td>
</tr>
<tr>
<td>1.5 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>1.5 to 2 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>1 to 2 hours</td>
<td>3</td>
<td>12%</td>
</tr>
<tr>
<td>1 to 3 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>2 hours</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>2 to 3 hours</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>3 hours</td>
<td>3</td>
<td>12%</td>
</tr>
<tr>
<td>3 to 4 hours</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>4 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>5 to 6 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>5 to 8 hours</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>8 hours</td>
<td>1</td>
<td>4%</td>
</tr>
</tbody>
</table>
The ninth question asked them what they did on the computer daily. The respondents were not given choices to select from. They were just given examples such as check your e-mail, chat with friends, surf the Internet, etc. The 25 respondents provided multiple answers. Refer to the following table.
Table 5

*Daily Activity on the Computer (April 7 – April 13)*

<table>
<thead>
<tr>
<th>Activity on Computer</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check e-mail</td>
<td>23</td>
<td>92%</td>
</tr>
<tr>
<td>Work on assignments</td>
<td>20</td>
<td>80%</td>
</tr>
<tr>
<td>Chat</td>
<td>15</td>
<td>60%</td>
</tr>
<tr>
<td>Surf the Internet</td>
<td>10</td>
<td>40%</td>
</tr>
<tr>
<td>Do research</td>
<td>3</td>
<td>12%</td>
</tr>
<tr>
<td>Check Blackboard 5.0</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Check grades</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Check bill status</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Check online cell phone information</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Read about current events</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Web maintenance</td>
<td>1</td>
<td>4%</td>
</tr>
<tr>
<td>Games</td>
<td>1</td>
<td>4%</td>
</tr>
</tbody>
</table>
The third set.

The third set of questions covered the period from April 14 to April 27. Only 23 out of the 25 respondents handed in their third set of questions (via e-mail). Data from the first question in the third set of questions revealed that out of the 23 respondents, only 3 respondents or 13.04% said that they had problems with their assignments that week. When asked what the problem was and how they solved them, the first respondent replied, "At first I tried working on the problem and then I went to Dr. ...'s office and asked her for help." The second respondent said, "I don't think that I quite understood assignment 7 so I asked on the help board but no one answered. ...so I guessed. It worked too." The third responded:

I had a problem with assignment #5. I realized that I needed to save 5a, 5b, 5c, and 5d separately after an email I received from Dr. ... on May 5, 2003. I did the assignment on time but it is all saved under just Rupp5. I emailed Dr. ... but I have yet to hear from her. I hope we can fix this mix up.

In the second question, the respondents were asked if they had asked anyone for help in completing their assignments. Eight respondents or 34.78% replied that they
had. When asked who it was and what the problem was that they needed help with, the 8 responded as such:

1. I asked a friend in the class if she was following the lesson plan according to the one on the tutorial.

2. I have asked multiple friends who have computer knowledge.

3. I asked Dr. ... for help on assignment number seven and asked her to clarify on the details of the assignment.

4. I asked my girlfriend to help me with some special features in PowerPoint, in order to make my presentation more creative.

5. One of my friends took the class last quarter and she just helped clarify the directions so I knew exactly what was expected of me in the assignment.

6. I posted something on the discussion board on Blackboard, it was dealing with should we use an excel and word program for assignment nine.

7. I had never used Excel before, so I asked a friend about the basics of the program.

8. Stated above. (This respondent had answered this question in the first question as "I don't think
that I quite understood assignment 7 so I asked on the help board but no one answered. ...so I guessed. It worked too.

The third question asked the respondents if they had encountered any problems with Blackboard 5.0 that week. All 23 respondents replied that they had not encountered any problems with Blackboard 5.0.

The fourth question asked if the respondents had encountered any other problems not related to Blackboard 5.0 such as problems with their computer, difficulty finding materials on the Internet, etc. Four respondents or 17.39% said that they had. The problems encountered were as follows:

1. For some of the sites that we had to find I had some trouble finding sites that pertained to exactly what I needed.
2. Excel kept deleting pages on my spreadsheet. I'd do one and then add another page and it would delete the first. I worked on a different computer.
3. Already explained above. (This respondent referred to her answer in question one which stated: "I had a problem with assignment #5. I realized that I needed to save 5a, 5b, 5c, and 5d separately after an email
I received from Dr. ... on May 5, 2003. I did the assignment on time but it is all saved under just Rupp5. I emailed Dr. ... but I have yet to hear from her. I hope we can fix this mix up."

4. I had computer problems dealing with the hyperstudio program, it was just difficult to use, but I stuck with it, and it was fine.

The fifth question asked the respondents if they had gone to the Help forum on Blackboard 5.0. Fourteen respondents or 60.87% said that they had. When asked what they did, the respondents chose the following responses:
Table 6

Activity on the Help Forum on Blackboard 5.0 (April 14 – April 27)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read the questions, comments, and replies only</td>
<td>12</td>
<td>85.71%</td>
</tr>
<tr>
<td>Read the questions, comments, and replies, and post a question</td>
<td>1</td>
<td>7.14%</td>
</tr>
<tr>
<td>Post a question only</td>
<td>1</td>
<td>7.14%</td>
</tr>
</tbody>
</table>

The fourth set.

The fourth set of questions covered the period from April 28 to May 12. Only 23 respondents out of a possible 25 handed in (via e-mail) their fourth set of questions. One respondent handed in the wrong set of questions. When asked how they planned their time to read and complete the assignments in the class, 5 out of the 23 respondents or 21.74% said that they planned their time on a daily basis,
17 or 73.91% said that they planned their time on a weekly basis, and 1 or 4.35% chose "Other" and said, "I just really did them all together on a day every couple weeks."

When asked if the respondents had gone to the Help forum on Blackboard 5.0, 7 respondents or 30.43% said that they had. When asked what they did, 5 of the 7 respondents or 71.43% said that they read the questions, comments and replies and 2 or 28.57% said that they posted a question.

When asked if they thought the Help forum was helpful, 13 respondents or 56.52% said that it was, 3 or 13.04% said that it was not, 2 or 8.70% said it was not applicable, 4 or 17.39% did not select either yes or no but answered the second part of the question that asked "Why/Why not?", and 1 or 4.35% did not answer the question. The 13 respondents who thought the Help forum was helpful said the following:

1. It is if people use it. I didn't want to use it because it doesn't look like many people do, so I wasn't sure I would get my question answered.

2. Even though I did not use it I still knew it was there if I needed it which was helpful enough for me.

3. I think it would definitely be helpful if students would actually use it.
4. I think it useful because if I was stuck on something I would have used it, especially if I could not get a hold of Dr. ... or [the researcher].

5. It was useful for me because I somehow lost the test questions and as soon as I posted a question I got a lot of responses.

6. It's nice to be able to talk to peers about classes. The Help Forum allows students to help other students and sometimes people learn better from their peers. Also, the help forum gives everyone 24-hour access to help. Teachers are not always available, so I think it is useful.

7. I think it is a good idea, and if I needed help I would have used it.

8. Since we do not meet as a class, it is useful to find the answer to a question.

9. The forum is helpful because it not only allows us to post our questions and concerns in a larger setting, but it also pools the resources of everyone in the class; if someone sees the question before Dr. ... does, they can offer up
their answer, helping the student resolve the situation in a expedited manner.

10. It's a good way to get answers to questions.
11. It allows you to see if other students have the same questions you do.
12. It is an additional way to get help if needed.
13. Gives students a way to interact with other students.

The 3 respondents who said that the Help forum was not helpful said the following:

1. I don't think the first few times the questions posted were answered for everyone to see them.
2. No one really used it.
3. Because when I would post a question, no one would answer it, and when it was answered, I had already figured out the problem.

The 2 respondents who said that it was not applicable had the following things to say:

1. I am sure it would have been had I taken the time to use it.
2. I never went there, I think we should have students numbers, or perhaps a group activity to meet others who could help.
The 4 respondents who answered the second part of the question that asked "Why/Why not?" but did not select either yes or no to the first part of the question said:

1. Only if everyone uses it and the teachers put there imput in.
2. I've never used it.
3. I have never used it but I am sure it is useful for some people.
4. I'm indifferent. I think it would have been more helpful had people used it. Then questions would have been answered on a daily basis.

Analysis and discussion.

The results indicate during the period from March 31 to April 5 (N=24), 13 respondents or 54.17% were taking 18 hours or more and 45.83% said that the reason they took an online class was that it fit their schedule. All the respondents said that they were familiar with Blackboard 5.0 and 91.67% had access to a computer either at home or in their dorm rooms.

In terms of encountering problems with Blackboard 5.0, during the period of March 31 to April 6 (N=24), only 2 respondents or 8.33% had encountered problems with Blackboard 5.0. During the period of April 7 to April 13
none of the respondents encountered any problems with Blackboard 5.0.

In terms of encountering problems not related to Blackboard 5.0, during the period of March 31 to April 6 (N=24), 8 respondents or 33.33% had encountered problems not related to Blackboard 5.0. During the period of April 7 to April 13 (N=25), 15 respondents or 60% had encountered problems not related to Blackboard 5.0. This shows an increase of 7 respondents. During the period of April 14 to April 27 (N=23), 4 respondents or 17.39% said that they had encountered problems. This shows an 11 respondent decrease from the week before.

Data on the daily use of the computer during the period of March 31 to April 6 (N=24) revealed that 22 respondents or 91.67% used the computer for 2 hours or more daily on both classwork and in personal use. All the respondents revealed that they used the computer for classwork and to check their e-mails.

During the period of April 7 to April 13 (N=25), all 25 respondents said that they spent 2 hours or more on the computer daily in doing class assignments. This shows an increase of 11 respondents from the period of March 31 to
April 6 (N=24). In general, 13 respondents spent 2 hours or more on the computer daily. The majority of the students checked their e-mail (23 respondents), worked on their assignments (20 respondents), and chatted (15 respondents).

On a weekly basis, 58.33% spent 4 hours or more on the computer for classwork from March 31 to April 6 (N=24). During the period of April 7 to April 13 (N=25), 21 respondents or 84% spent 4 hours or more working on their assignments that week. This shows an increase in computer use for classwork.

In terms of problems with their assignments, during the period of April 7 to April 13 (N=25), 11 respondents or 44% had problems with their assignments that week. Out of the 11 respondents, only 6 respondents asked someone for help in completing their assignments. These respondents asked friends from the class, an individual who lived down the hall who had taken the class the quarter before, a girlfriend, and the instructor. Only 6 respondents communicated online with the other students in the class and 5 said that they talked about their assignments and 1 talked about grades. 3 respondents (N=23) or 13.04% said they had difficulty with their assignments for the period of April 14 to April 27. They solved the problem by asking
the class instructor and on their own by guessing. In terms of whether the respondents had asked anyone for help with their assignments, in the period of April 14 to April 27, 8 respondents replied that they had asked someone for help. They asked the class instructor, friends, girlfriend, and the Help forum. This shows that the respondents tried to seek help wherever they could but very few asked classmates online for help.

In terms of whether the respondents had gone to the Help forum during the period of April 14 to April 27 (N=23), 14 respondents or 60.87% said that they had. Thirteen of the respondents read the questions, comments, and replies but only 2 posted a question. During the period of April 28 to May 12 (N=23), 7 respondents said that they had gone to the Help forum. Five respondents said they read the questions, comments, and replies and 2 respondents said they posted a question. This shows a marked decrease in the number of respondents going to the Help forum for help. Thirteen respondents said that the Help forum was helpful. Three respondents said that it was not helpful as they did not receive an immediate reply to their questions or they did not receive a reply at all. This shows that although
the majority of the respondents agreed that the Help forum was helpful, they did not seek help there.

In terms of how the students planned their time to read and complete the assignments during the period of April 28 to May 12 (N=23), 5 respondents or 21.74% said that they planned their time on a daily basis, 17 or 73.91% planned their time on a weekly basis and 1 respondent or 4.35% just did them all on a day every couple of weeks.

The results from the pilot study indicate that there is a need for further research on the help seeking behavior of adult online learners as they spent more time on the computer working on assignments as the weeks progressed and asked various people for help. The question that needs to be asked is if the respondents asked for instrumental help or executive help and how much time they spent on the assignment before seeking help. The respondents thought that the Help Forum was helpful but did not trust it enough to use it. In informal talks with the respondents, the researcher found that the students preferred to ask either the instructor or the researcher for help as they did not believe that their fellow classmates could be of much help. They also did not like the fact that they had to wait a few days or weeks before someone responded to their questions.
As the students lived on campus, they had access to the instructor and the researcher for face-to-face help and a number of the students took advantage of this fact and requested help both from the instructor and also the researcher. The researcher found that most of the students who asked for face-to-face help just wanted executive help. They wanted the researcher to sit with them and walk them through the whole process. Further research needs to be done on adult online students who do not live on campus and so do not have easy face-to-face access to the instructor.

Data Collection Procedures

According to Bogdan and Biklen (1998), in order to establish a fact, more than one source of data has to be employed. Multiple sources of data lead to a better understanding of the phenomenon under study. This process is known as triangulation. "Different kinds of data give the analyst different views or vantage points from which to understand a category and to develop its properties; these different views we have called slices of data" (Glaser & Strauss, 1967, p. 65). This researcher used questionnaires, student journals, interviews and focus groups to establish the credibility of the data.
Questionnaire

A questionnaire was administered to all the students at the beginning of the quarter (see Appendix C). The purpose of the questionnaire was to obtain background information on the students and their level of computer literacy.

Standardized Tests

Two standardized tests were administered to all the students at the beginning of the quarter. The first was Good-L and Good-K's (n.d.) *A Measure of Self-Esteem* (see Appendix D). This is a 27-item true-false test to measure the students' level of self-esteem. The scale is for an adult population. The purpose of the standardized test was to investigate any relationship between self-esteem and the help seeking behavior of the students.

The second test was Pintrich et al.'s (1991) *Motivated Strategies for Learning Questionnaire* (MSLQ) (see Appendix E). This is an 81 item, 7-point Likert scale test. The 81 items are grouped into 15 scales. 31 items deal with motivation, 31 items deal with learning strategies, and 19 items deal with student management of different resources. The purpose of the MSLQ was to investigate any relationship...
between self-regulated learning and the online learning environment.

Student Journals

The students were required to keep a weekly journal (see Appendix F) on how much time they spent on assignments per week. They were also required to specify any help they obtained to complete the assignments. They had to specify their level of frustration (if any) in trying to complete the assignment and at what point they decided to seek help and from whom. The weekly journals were sent to the researcher every week via e-mail.

Interviews

The students were interviewed for about 45 minutes to an hour towards the end of the quarter (see Appendix G). The researcher conducted standardized open-ended interviews which were audio-taped. The reason for choosing this interview type is to ensure that respondents answer the same questions in the same order. This increases the comparability of the responses and ensures that data is collected on the main topics (Tuckman, 1972).

Focus Groups

Two focus groups were conducted by the researcher at the end of the quarter. The first focus group had ten
students. The second focus group had seven students. The focus groups were video-taped. The focus groups were conducted to further explore topics and themes unearthed in the interviews and the weekly journals.

Data Analysis

Data analysis is the process of systematically arranging the data from the questionnaires, standardized tests, student journals, interview transcripts, and focus group transcripts in order to understand the data and present the information to others. In essence, data analysis involves "working with data, organizing them, breaking them into manageable units, synthesizing them, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others" (Bogdan & Biklen, 1998, p. 157). The data analysis process was ongoing throughout the whole quarter and it was a recursive process in that analysis informed data collection.

The researcher printed all data received in electronic form. The interviews were audio-taped and transcribed verbatim. The focus groups were video-taped and transcribed verbatim. The questionnaires, the two standardized tests, the weekly student journals, the interview transcripts, and
the focus group transcripts were kept in appropriately labeled folders. The information from the questionnaires, the two standardized tests, the weekly student journals, interview transcripts, and focus group transcripts were read once and coded into appropriate categories. The weekly student journals, interview transcripts, and focus group transcripts were read several times in order to flush out the themes not initially categorized. The data from the standardized tests were used in a descriptive manner. A comparison was made between the answers given in the standardized tests with answers given in student journals and interviews. Discrepancies between the answers given by the participants to the two standardized tests and the answers given in the student journals and during the interview process were investigated in-depth. The tests were also used to categorize the participants. Profiles of groups or individual participants emerged from the process of categorization.

Data reduction then occurred by a process of contrasting and comparing the categories. Similar categories and subcategories were collapsed into one unit. The themes that emerged from the questionnaires, the standardized tests, the student journals, the interviews,
and the focus groups then formed the theoretical framework of the research.

**Trustworthiness**

According to Erlandson, Harris, Skipper, and Allen (1993), in order for intellectual inquiry to have an impact on human knowledge, either by adding to an overall body of knowledge or by solving a particular problem, it must guarantee some measure of credibility about what it has inquired, must communicate in a manner that will enable application by its intended audience, and must enable its audience to check on its findings and the inquiry process by which the findings were obtained (p. 28).

Lincoln and Guba (1985) refer to these qualities as trustworthiness. Trustworthiness can be built by establishing credibility, transferability, dependability, and confirmability. Credibility can be established through prolonged engagement, persistent observation, triangulation, peer debriefing, referential adequacy, and member checks. Transferability can be established through thick description and purposeful sampling. Dependability can be established through reliability. Reliability depends
on replication as it deals with consistency. "Since there can be no validity without reliability (and thus no credibility without dependability), a demonstration of the former is sufficient to establish the latter" (p. 316). Confirmability can be established through objectivity. This means that the "findings of an inquiry are determined by the subjects (respondents) and conditions of the inquiry and not by the biases, motivations, interests, or perspectives of the inquirer" (p. 290).

The researcher used several of the techniques described above to establish trustworthiness. To establish credibility, triangulation was used. To establish transferability, thick description and purposeful sampling was used. To establish dependability the researcher showed the replicability of the research. To establish confirmability, the researcher indicated the objectivity of the study in the findings.

Summary

This research is a case study that used questionnaires, standardized tests, weekly student journals, interviews, and focus groups to investigate the help seeking behavior of adult online students at a large Midwestern university. As help seeking exists in many
different contexts and there is no widely accepted theoretical perspective in help seeking, the theoretical framework of this research is based on grounded theory. This means that the theory emerges from the data. The rationale for the study comes from the pilot study. The results of the pilot study showed that different students used different help seeking strategies. Some of the students requested executive help whereas other students requested instrumental help.

In order for online instructors to encourage instrumental help seeking, where, when, and how help is obtained has to be understood. This research study provides a basis for that understanding. This understanding will then provide information on how online courses should be structured in order to promote instrumental help seeking. The trustworthiness of the data was established through triangulation, thick description, purposeful sampling, replicability, and objectivity.
CHAPTER FOUR

Results and Analysis

This chapter provides the findings of this case study. The case study investigated the help seeking behaviors of 28 undergraduate students taking an online course in technology at the College of Education of a large Midwestern university. The study explored the following research questions:

1. What types of help are sought, from whom help is sought, and when is help sought in an online environment.

2. What is the relationship of self-esteem to help seeking in an online environment.

3. What is the relationship of self-regulated learning to an online learning environment

Emergent Methodology

As the grounded theory approach was used, data collection and analysis occurred simultaneously. As such, some of the data collection process evolved and changed as dictated by the emergent findings from the data. Eisenhardt (1989) refers to this as controlled opportunism.

The interview protocol was one data collection process that was adjusted in the light of the findings that
emerged. The initial interview protocol contained 13 questions. After conducting the first interview, the researcher discovered that the interview protocol did not generate the desired information. It was also discovered that a key element of research question two, i.e., self-esteem, was neither asked nor did it emerge during the interview. A second interview protocol was then devised. It included questions on self-esteem, seeking help on the discussion board, communication with the instructor, learning strategies used by the students, and amount of time spent studying for the class. The following two important questions were also included:

1. Have you encountered any problems taking an online course?

2. How would you change this online class to better meet your needs?

After interviewing three students using the second interview protocol, it was discovered that it needed further adjusting and refining. One of the questions had to be reworded as it only produced yes or no answers without much elaboration. "Did you seek help on any of your assignments?" was changed to "Give an example of a time when you sought help in this class." This produced more in-
depth answers. The following important question was also added:

How would you change this online class to better meet your help seeking needs?

This third interview protocol was used to interview the rest of the students.

Another data collection procedure was added after the discovery of an important finding. During the interviews, it was discovered that three of the students considered self-esteem as consisting of more than one entity. Specifically, students differentiated between academic self-esteem and social self-esteem. This finding led the researcher to devise a short follow-up questionnaire on self-esteem. The findings from this follow-up questionnaire and all the other findings from this case study are presented below in answer to the three research questions posed above.

**Research Question One**

This research question was broken down into three components, namely, the types of help sought, from whom help was sought, and when help was sought.
The Types of Help Sought

This component of research question one was investigated through data collected from the weekly journals and the interviews. The themes that emerged from this component of research question one were:

1. The majority of the students sought executive help.
2. The majority of the students were frustrated with their inability to complete the assignment without help.
3. The majority of the students assumed that an online class is easier and less time-consuming.

In the weekly journals, the students were asked a question with five subparts as follows:

Did you seek help in completing your assignment?

a. If yes, how much time did you spend on your assignment before seeking help?

b. If yes, whom did you ask for help?

c. If yes, did you ask for the answer or did you just ask for a hint so that you could complete it on your own? Describe the situation.

d. If yes, was it a pleasant experience? Explain.
e. If yes, was it successful (i.e., did you get the help you needed)?

Data was collected from the third subpart to this question, i.e., if you had sought help for this assignment, did you ask for the answer or did you just ask for a hint so that you could complete it on your own? If the students asked for the answer, then they were in essence asking for executive help. If the students asked for a hint, they were asking for instrumental help. The students had to answer this question for every assignment. There were a total of 12 assignments.

In assignment one, the students had to write about themselves in Microsoft Word and insert their pictures. Instructions on what to include in the personal narrative, how to name the files, how to insert the header and footer, where to place their names, where and how to insert page numbers, and links to tutorials that may help them were provided. Students were also referred to the suggested textbook if they needed help. They had to submit assignment one through the digital drop box on Blackboard 5.0 by the due date. This assignment was very basic except for the picture which the students had to insert in the Microsoft Word document. Students could either use a digital camera
to take a picture of themselves or scan a picture that they already had. They could check out a digital camera from the Media Center. There are two computer labs adjacent to the Media Center that the students could use to scan pictures. Lab B had two scanners and Lab A had one.

Of the ten students who sought help for assignment one, nine sought executive help. They basically asked the helper to solve the problem for them. One of these nine students actually attempted to ask for hints but in the end gave up and just asked the helper to solve the problem. This student said:

I was asking for hints but when those didn't help me any, I eventually got them [roommates] to come and look at what I was trying to do then we worked on it together.

Only one of the ten students who asked for help actually asked for a hint.

I did not know how to get the text to wrap around the picture so she [friend] showed me where the button to do that was.

In assignment two, the students had to create a school event flyer in Microsoft Publisher. This flyer would be used for a field trip. The students had to include all the
information the parents would need for the trip including emergency numbers, time of departure and return, lunch costs and permission signature. The students also had to use a drawing tool and insert a graphic. The flyer had to have a tear-off section that had to be returned to the teacher after permission was granted by the parents. Students were informed that if they needed help or ideas to complete this assignment, they could e-mail the instructor. They had to submit assignment two through the digital drop box on Blackboard 5.0 by the due date. Links to helpful tutorials were also provided. Students were also referred to the suggested textbook if they needed help.

Five students sought help for assignment two. Four students sought executive help and one student asked for a hint to solve the problem himself or herself.

In assignment three, the students had to create a table in Microsoft Word that showed their daily schedules. They had to use the Table Menu and merge cells. They had to place their names and assignment numbers on the right side of the header and page numbers at the bottom center. They had to have a title for their schedule. Assignment three had to be submitted through the digital drop box on Blackboard 5.0 by the due date. Links to helpful tutorials
were also provided. Students were also referred to the suggested textbook if they needed help.

Five students sought help for assignment three. Four students sought executive help. One of the four students said:

I asked for the answer, but he [friend] didn't know it, so I completed it on my own.

Another student said:

After working for about three hours on the weekly schedule, and three trips to the lab in ... to work on the KidPix assignment. Then finally almost four hours on that project I asked the lab assistant to help with the slide show, which I am still not sure got sent correctly.

Only one student who asked for help, asked for a hint.

A hint. I was confused about how to do background coloring so she [friend] told me to go to the table button and I should find it.

In assignment four, the students had to create an eight to ten slide short story for a child aged between 4 to 8 years old using KidPix. It had to include a title page and a final page. Each page would have to be created individually and saved individually. Once the eight pages
are completed, they would have to be converted to a slide show. The completed work then would have to be saved as a QuickTime movie. Instructions on how to use the software and where to get help was provided. Assignment four had to be submitted through the digital drop box on Blackboard 5.0 by the due date.

Thirteen students sought help for assignment four. Ten students sought executive help. Most of them needed help with converting the KidPix Slide Show into a movie. As one student said:

I didn't know how to turn it into a quick time file so I asked how to do so. The instructor showed me how to do it.

Three students who sought help on this assignment, did not ask anyone for help. One student said:

I didn't ask anyone for help, I finally remembered that I had printed out the KidPix Notes, and I looked on there for help.

Another said:

I looked at the help work sheets on Blackboard.

The third student said:

We [friend] were just trying to figure out how to convert the slide show to Quick Time...we tried a
couple different times and then I just looked it up on Blackboard.

In assignment five, the students had to read Chapter 8 in their textbook (Teachers Discovering Computers: Integrating Technology in the Classroom by Shelly, Cashman, Gunter, and Gunter) in order to understand the following educational issues which were listed in their assignment:

- Computer Viruses
- Virus Detection and Removal
- Unauthorized Access and Use
- Firewalls
- Hardware Theft and Vandalism
- Software Theft
- Information Privacy
- Spam
- Copyright Laws
- Fair Use
- Acceptable Use Policies
- Assistive Technology

The students had to find a Web site on six of the twelve issues above. They had to write a summary of the contents of the Web site in one paragraph and create a
bookmark at the end of the paragraph so that the Web site could be easily located. Students were asked to refer to the suggested tutorials under the Course Documents section of Blackboard 5.0 if they needed help.

Four students sought help for assignment five. One student sought executive help and one student asked for a hint. Two students found the help elsewhere. One of these two students actually tried to ask some of her friends for help but to no avail.

I asked about how to do bookmarks, but no one really knew how so I just guessed by myself until I saw the article on Blackboard.

The second student said:

I needed to know how many websites we needed so I looked on the help forum and someone had already asked and got a reply.

In assignment six, the students had to create a PowerPoint presentation. In order to accomplish this they had to read about technology integration in the teaching and learning process in their textbook (Teachers Discovering Computers: Integrating Technology in the Classroom by Shelly, Cashman, Gunter, and Gunter). The students had to select one of the educational issues and
develop an eight to ten slide PowerPoint presentation. They had to use different layouts for each slide. Students were encouraged to use text, charts, graphics and/or animation effect features. The first slide had to include the title, author and date. The final slide had to designate the end of the Slide Show. Students were asked to refer to their textbook for guidance. Links to helpful tutorials were also provided. Students were also referred to the rubric under the Course Document section of Blackboard 5.0 for the criteria and grading on the project. The assignment had to be submitted through the digital drop box on Blackboard 5.0.

Three students sought help for assignment six. All three sought executive help. One student asked her roommate to help her look for something she could not find. The second student asked a friend who had experience with PowerPoint to show her where to go and what different things she could do for her presentation. The third student asked her friend how to do a transition.

In assignment seven, the students had to use Microsoft Excel to create a spreadsheet and graphs. They were provided with a set of data that represented the temperatures of a three-week experiment to create the
spreadsheet and graphs. They were asked to find the mean
temperature of each week and each day of the week and
create a line graph to show the temperature changes for
each week. The students also had to create a pie chart of
the average daily temperatures and a bar chart of
temperatures for one week. Students were asked to refer to
their textbook for guidance. Links to helpful tutorials
were also provided. The assignment had to be submitted
through the digital drop box on Blackboard 5.0.

Eight students sought help for assignment seven. Seven
students sought executive help. One student looked for
answers on her assignment page.

I went to the web page at the bottom of the paper with
the assignment on it before I started. I figured it
out from the directions.

In assignment eight, the students had to create a
lesson plan for K-12 students. The K-12 students had to be
taught how to create a spreadsheet and a graph. The lesson
plan had to include an example of the spreadsheet and graph
that the K-12 students would create. Students were asked to
refer to their textbook for guidance. Links to helpful
tutorials were also provided. The assignment had to be
submitted through the digital drop box on Blackboard 5.0.
Six students sought help for assignment eight. Four students sought executive help. One of the four students said:

I asked for the answer because I didn't have much time.

Two students asked for hints. One of the students who asked for a hint said:

There was no one answer to my question. I just asked him [a friend] how to go about doing the assignment and if were supposed to make the information up that we put in the spread sheet.

The other student said:

Hint. I just did not know how to complete the assignment so she [a friend who was taking the same class but not an online one] told me I had to use the internet to find the standards.

In assignment nine, the students had to evaluate two Web sites that had content in their specific teaching areas. They had to use the Web evaluation form in the Course Document section of Blackboard 5.0. The assignment had to be submitted through the digital drop box on Blackboard 5.0.

Nobody sought help for assignment nine.
In assignment ten, the students had to create a Web site. The Web site could either be a personal site, an educational site that they could use with their class, or a Web site that would help them in their jobs. The site had to have a minimum of four pages. Every page had to have buttons that linked to all the other pages. There had to be at least one graphic and an external link (i.e., a link to a Web site or URL outside of the Web site being created). The Web site then would have to be uploaded or published. Some important rules for creating Web pages were listed so that students would not have any problems uploading their Web sites. Students were asked to refer to the tutorials under the Course Documents section of Blackboard 5.0. They were encouraged to use any Web building software. After the students had published their Web sites, they had to e-mail their URLs to the professor.

Twenty-four students sought help for assignment ten. Twenty-one sought executive help. Two students asked for hints. One student asked for both hints and the answer.

I had help with hints and also people helped me do the project.

In assignment 11, the students had to create a
short 2-minute movie and save it as a QuickTime movie. In order to do this they could use the digital camera from the Media Center to take ten pictures; they could scan ten pictures that they already had; or use ten pictures from the Internet. The pictures had to be related so that a movie could be created with a story line. They would then use either Camtasia or iMovie to create the movie. The students were encouraged to use the tutorials under the Course Documents section of Blackboard 5.0.

Fifteen students sought help for assignment 11. Ten students sought executive help. Three students asked for hints. One student tried to find help but could not find anyone.

I stopped by for office hours once but was unable to locate the instructor. Other than that, I did print out the tutorial that was on Blackboard....I never actually found anyone to help, so no it was not a successful experience.

Another student sought both hints and answers.

He [boyfriend] gave me hints for most of it, but I did just ask for the answer a few times.

In assignment twelve, the students had to check out a piece of software from the Media Center and evaluate the
software using the Software Evaluation Form located under the Course Documents section of Blackboard 5.0. The students had to submit their assignment through the digital drop box on Blackboard 5.0.

Two students sought help for assignment twelve. Both sought executive help. One student said:

I just asked what the terminology meant, and they [instructors] were nice enough to sit down and help me with how to find certain questions on the software.

The other student asked her friend where to find information on the amount of memory and hard drive space needed for the software.

I asked her where to find it....she got mad at me cause I didn't know how to use the program.... we looked through the program and found what we thought it was.

The table below summarizes the type of help sought in the weekly journals.
Table 7

Type of Help Sought for Each Assignment According to the Answers Provided in the Weekly Journals

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Help Sought</th>
<th>Executive Help</th>
<th>Instrumental Help</th>
<th>Both or Other Types of Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Story created in Word</td>
<td>10</td>
<td>9</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2. Flyer created in Publisher</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3. Weekly schedule created in Word</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4. Story created in KidPix</td>
<td>13</td>
<td>10</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5. Bookmarks created in Microsoft Word</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 7 (continued)

*Type of Help Sought for Each Assignment According to the Answers Provided in the Weekly Journals*

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Help Sought</th>
<th>Executive Help</th>
<th>Instrumental Help</th>
<th>Both or Other Types of Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Presentation created in PowerPoint</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Spreadsheet and graphs created in Microsoft Excel</td>
<td>8</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8. Lesson plan created in Microsoft Word</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>9. Evaluation of Web sites using the Web Evaluation Form</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 7 (continued)

*Type of Help Sought for Each Assignment According to the Answers Provided in the Weekly Journals*

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Help Sought</th>
<th>Executive Help</th>
<th>Instrumental Help</th>
<th>Both or Other Types of Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Personal Web</td>
<td>24</td>
<td>21</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>page created</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in Microsoft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FrontPage or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>software</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. QuickTime Movie</td>
<td>15</td>
<td>10</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>created in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iMovie or</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camtasia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the table above, it is obvious that the majority of the students sought executive help, i.e., students just wanted answers, for almost every assignment. Only for assignment five was the number of students who sought executive help equal to the number of students who sought instrumental help. None of the students asked for help for assignment nine.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Help Sought</th>
<th>Executive Help</th>
<th>Instrumental Help</th>
<th>Both or Other Types of Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Evaluation of software using the Software Evaluation Form</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
The majority of the students were frustrated with their inability to complete the assignment without help.

This theme reflects the frustration experienced by the students in not being able to complete the assignments on their own without seeking help. Data from the weekly journals revealed that on seven of the twelve assignments, more than 50% of the students were frustrated in trying to complete the assignment on their own. For assignment one, 57.14% of the students were frustrated. For assignment two, 52.17% of the students were frustrated. For assignment three, 59.26% of the students were frustrated. For assignment four, 84.62% of the students were frustrated. For assignment seven, 53.85% of the students were frustrated. For assignment ten, 89.29% of the students were frustrated. For assignment eleven, 58.33% of the students were frustrated. The table below shows the percentage of students who were frustrated in trying to complete their assignments based on the answers given in their weekly journals.
Table 8

Percentage of Students who were Frustrated in Trying to Complete their Assignments

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number of students who were frustrated</th>
<th>Total number of students who handed in the Weekly Journals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Story created in Microsoft Word</td>
<td>16</td>
<td>28</td>
<td>57.14%</td>
</tr>
<tr>
<td>2. Flyer created in Microsoft Publisher</td>
<td>12</td>
<td>23</td>
<td>52.17%</td>
</tr>
<tr>
<td>3. Weekly schedule created in Microsoft Word</td>
<td>16</td>
<td>27</td>
<td>59.26%</td>
</tr>
<tr>
<td>4. Story created in KidPix</td>
<td>22</td>
<td>26</td>
<td>84.62%</td>
</tr>
</tbody>
</table>
Table 8 (continued)

Percentage of Students who were Frustrated in Trying to Complete their Assignments

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number of students who were frustrated</th>
<th>Total number of students who handed in the Weekly Journals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Bookmarks created in Microsoft Word</td>
<td>9</td>
<td>28</td>
<td>32.14%</td>
</tr>
<tr>
<td>6. Presentation created in PowerPoint</td>
<td>7</td>
<td>28</td>
<td>25.00%</td>
</tr>
<tr>
<td>7. Spreadsheet and graphs created in Microsoft Excel</td>
<td>14</td>
<td>26</td>
<td>53.85%</td>
</tr>
</tbody>
</table>
Table 8 (continued)

**Percentage of Students who were Frustrated in Trying to Complete their Assignments**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number of students who were frustrated</th>
<th>Total number of students who handed in the Weekly Journals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Lesson plan created in Microsoft Word</td>
<td>12</td>
<td>27</td>
<td>44.44%</td>
</tr>
<tr>
<td>9. Evaluation of Web sites using the Web Evaluation Form</td>
<td>1</td>
<td>28</td>
<td>3.57%</td>
</tr>
<tr>
<td>10. Personal Web page created in Microsoft FrontPage or other software</td>
<td>25</td>
<td>28</td>
<td>89.29%</td>
</tr>
</tbody>
</table>
Table 8 (continued)

**Percentage of Students who were Frustrated in Trying to Complete their Assignments**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Number of students who were frustrated</th>
<th>Total number of students who handed in the Weekly Journals</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. QuickTime Movie created in iMovie or Camtasia</td>
<td>14</td>
<td>24</td>
<td>58.33%</td>
</tr>
<tr>
<td>12. Evaluation of software using the Software Evaluation Form</td>
<td>6</td>
<td>27</td>
<td>22.22%</td>
</tr>
</tbody>
</table>

The information in the table above reveals the fact that assignments four and ten caused more than 80% of the students to be frustrated.
In assignment four, the students had to create an eight to ten slide short story for a child aged between 4 to 8 years old using KidPix. It had to include a title page and a final page. Each page had to be created individually and saved individually. The eight pages then had to be converted into a slide show. The completed work then would have to be saved as a QuickTime movie. One of the reasons for the high degree of frustration for assignment four was unfamiliarity with the software. This information was obtained from the demographic questionnaire (see Appendix C) given to the students on the first day of class and also from the answers given in the weekly journals. In the demographic questionnaire, students were asked the following question.

I have used the following software programs. (Check all that apply)

- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Publisher
- KidPix
- Built personal Web page
Only one student admitted that he or she knew how to use KidPix. The majority of the students had never used the software program at all.

In the weekly journals, when students were asked if they were frustrated in completing assignment four, 22 students acknowledged that they were frustrated.

- I was very frustrated trying to send and save this assignment. I could not figure out how to use the program and no one in the computer lab was familiar with the program.

- The thing that frustrated me the most while completing the assignment was that I couldn't figure out how to erase something that I had just added. I figured out quickly how to go back one step, but I couldn't figure out how to back two steps in a row. Finally, I just learned to take my time and only make one mistake at a time.

- Yes! I had a hard time figuring out KidPix, and I didn't know how to save the assignment as a QuickTime movie.
• Yes. I have had many questions about things. Also as you probably know I have had a hard time making it a QuickTime movie.

• Yes because I had never used this program before and it wasn't very easy to navigate.

• Yes because I could not figure out how to save the KidPix story as an imovie.

• Yes, I couldn't figure out how to save it as a QuickTime Movie.

• Yes, because I had never used Kid Pix 3 before.

• I really didn't get frustrated when trying to complete the assignments. I was able to catch on the Kid Pix software pretty quick. The only time that I did get a little frustrated was when I was trying to figure out how to open a page that I had already saved. The manual was helpful for this, but I got a little frustrated because I couldn't find my tool bar to get to the file, open page.

• Yes, but only when I was trying to save and export.

• Yes, because this was a new program for me and it was hard to get used to.
A little, it took me a while to figure out how to use all the tools since I had not before.

Yes! Very.

I was frustrated with KidPix because my computer kept closing the program and I would lose slides I had been working on. That happened about 6 or 7 times. Also, it was very difficult for me to figure out how to save the slideshow as a QuickTime movie.

I was extremely frustrated with this assignment. It took me a long time to figure out what everything does. Then it took me a long time to sort through the pictures and decide on an idea for my story. I came up with many different ideas before I started my final story. When I did start the story, it was hard to write it based on the pictures available in the software.

Yes, this program is not user friendly.

A little because I have never used this program before, so it took some time to figure it out.

Yes, I had never used the program before and didn't know where anything was.
• Yes, I was frustrated because I didn't know how to work the program and I couldn't figure out how to minimize the KidPix in order to look up the handout on Blackboard.

• I've been completely frustrated by this assignment.

• I did get a little bit frustrated with my assignment because I was using a program that I was not familiar with at all.

• It was a little bit frustrating getting used to the program because I had never used it before. A couple times I went to make changes and ended up deleting a whole page of work.

From the answers given in the weekly journals, the majority of the students who were frustrated with this assignment found the software difficult to navigate as the menu bar was hidden and could only be located if they placed their cursors at the very top of the screen. The students were also frustrated as they had to learn the hard way that each slide had to be saved individually before converting them into a slide show. Another factor that caused frustration was the fact that many students did not know how to convert the slide show into a QuickTime movie.
This led to the majority of students not handing in the assignment on time. The instructor of the class had to post instructions on how to convert the slide show into a QuickTime movie on Blackboard 5.0.

In assignment ten, the students had to create a Web site. The Web site could either be a personal site, an educational site that they could use with their class, or a Web site that would help them in their jobs. The site had to have a minimum of four pages. Every page had to have buttons that linked to all the other pages. There had to be at least one graphic and an external link (i.e., a link to a Web site or URL outside of the Web site being created). The Web site then would have to be uploaded or published.

From the answers given in the weekly journals, this assignment caused a great deal of frustration because the majority of the students had difficulties even starting the assignment as they had no clue how or where to begin. The majority of the students had not built a Web page before as ascertained from the data collected from the demographic questionnaire (see Appendix C) given to the students on the first day of class. Only nine students admitted that they had built personal Web pages before taking this online class.
In the weekly journals, when students were asked if they were frustrated in completing assignment ten, 24 students acknowledged that they were frustrated (even though nine had created a Web page previously). Fourteen of the 24 students said they were frustrated with trying to build the Web site.

- Yes, at first I couldn't figure out how to even start, then the process was just long and tedious. But I'm proud of the result.
- Yes. I am not sure what I am doing.
- Yes I have never made a web page before, so I didn't know how to do it.
- I got a little bit frustrated when I was working with the links.
- Yes, because I have never created my own webpage by myself with no help.
- Yes, I can't seem to get my site to run smoothly.
- Yes, I could not figure out the right program to do the website.
- Yes, I was very frustrated. I guess I didn't really like the assignment and didn't understand it very well.
• I was frustrated because I have never made a web page before. I was also frustrated when following the tutorial instruction because I realized that I needed to use a university computer to complete the assignment. (On my PC I do not have a “SSH Secure Shell.”) So, I think the tutorial should mention that you need to use a university computer.

• Yes, because it was time consuming and I needed a lot of help.

• A little, but my friend who previously took this class helped me.

• Yes, I had never made a web page and I didn’t see the point in doing it. I didn’t understand how to make one and I don’t think I will ever make one in my life either.

• A little because I hadn't created a web page in a long time.

• I was frustrated when trying to work on the project because I could not find the help I needed as easily as I would have liked to.

The students also had difficulties trying to upload or publish their assignments onto the Web. Nine students (out
of the 24 who were frustrated) said that they had problems publishing their Web sites.

- I thought this assignment was very frustrating. I had a lot of trouble figuring out how to publish my website.
- Yes, I couldn't get my web page to upload after I followed all of the instructions given to me.
- I got a little frustrated when I was trying to load the web page to the ... server.
- Yes, I could not figure out how to upload my webpage.
- I was frustrated at the end when I was trying to finish my assignment because I didn't know how to publish it.
- I was frustrated trying to publish my webpage. Creating the webpage on Microsoft FrontPage was rather easy.
- Yes, but not at first. I completed my entire webpage, then took my disk to the lab to upload it. I was informed after almost an hour that there were problems with the computer I was working on, and all of my files were infected. I had uploaded some
pages of my site on another computer, but I lost everything on my server after that. I had to redo the entire site, and I am still having problems with one or two graphics that are still infected.

- Yes, it would not upload.
- Yes. This assignment was very frustrating to me because my page would not load for some reason. [The instructor] was with me in the lab when it happened, and it just wouldn’t work, no matter which computer I used or when I tried.

One student (out of the 24 who were frustrated) said that he or she had trouble with both building the Web site and uploading it.

Yes, formatting everything to look pleasing as well as uploading the webpage was very time consuming.

The high degree of frustration in both assignment four and assignment ten led students to seek answers instead of hints. As one student stated:

Answer. It's past twelve and my final portfolio is due, and my web page won't upload.
The majority of the students assumed that an online class is easier and less time-consuming.

This theme emerged from the interviews. It was discovered that most of the students thought that this class would be either easier as it was an online class, would be less time-consuming, or that it would both be easier and less time-consuming. When asked what their expectations were of taking an online class, six students said that it would be easier.

- Umm — at first I thought like I would kind of struggle with it just because you don’t get any instruction and you just have to like read on your own and stuff but I found that it was almost easier for me cause like I can like just do it on my own time and not to worry about like going to the class and sometimes when you just like sit and listen to the lectures all day you just kind of like get bored with it and since you’re reading the book anyways, you might as well just like, if the class is easy enough that you can just teach yourself then —ah — its better that way.

- I thought it would be easy, give me freedom to complete assignments when I felt like it, and that I
would not have to be treated like I didn’t know how to use technology or programs.

• Umm, well I expected it to probably be as much work as I put in to my other classes that I actually went to and um.. I thought, I expected it would be a little bit easier for me because I could — it was a little bit more malleable, like I could fit it into my time a better ummm yeah I guess that’s it.

• Not really, I thought it would be easier because I wasn’t sitting and listening to lectures and I would just be able to go at my own speed ...

• Um — probably like, more independence, like I tried to work for myself before asking for help and I just thought I would umm be able...but I like learning from my reading stuff so it was a lot easier than listening to someone.

• Ah — yeah — I figured it would be easier taking an online I mean not going to class just because a lot of time going to class is just kind of pain but ah — I figured it would be easier once I saw that it was like the PowerPoint — I've done PowerPoint before. Things like that, a lot of the stuff I knew
I could do on my own. Some of the later stuff is getting harder, but I figured it would be easier than, I could do it in my own time. I mean usually I sit down Sunday nights, for, like usually I'll set a block for two hours I'll set aside and it will take half an hour or the full two hours, but I'll set it aside just so I can get it done. I like doing it Sunday night, instead of going to class and doing it. It is kind of repetitive. So I like setting my own time.

Nine students said it would be less time-consuming.

- Umm — I have more time, I can work on it by myself and get it done and not have to deal with going to class everyday, and you know, if it was a boring class not wanting to be there and if it wasn't an exciting class you know, not wanting to go to work after or whatever you know?

- Um — well I mean I wasn’t looking to take an online class but I’m glad I did it because I have a little bit more time to work on my assignments um — its not — I don’t know — I — I work full time so — it does help because I live half hour away and so its
easier to come up here and do my assignments on whatever day I can try and get in to do my assignments...

- Umm — I definitely liked that it was an online course because it gives me time to do other stuff like if I need to have a meeting with someone else or like if I need to study for a test I don’t have to be in class during the class time you know, I can — I can do my assignments when I’m free to do them and other stuff — that’s definitely an advantage..

- Umm — I don’t think that it would be easier I just think — it probably don’t make sense I didn’t think the course would be easier but it would be easier for me to be able to do things like on my own time and not have to go to class every day and do it like at that certain time. I’m good at managing my time so I thought it would be more helpful for me. I don’t know plus I’m an education major and I have to do a lot of volunteer work so if I don’t have to come to class it is easier for me to volunteer at that time — so it was more convenient. I think convenience is probably is my expectation...
• Um — I was kind of nervous about it because I'm not really good with computers and that kind of stuff but I—um I ultimately decided because she [friend] is also not real good at computers and she got through it — and she got a good grade and I did think I that have like more free time than having to go to class — um — and then she said that umm — if she ever had a problem with an assignment she just met with the TA or professor or something; so I figured if I have a problem I could see the professor.

• To have, I guess to basically have more time for my other classes to fit in, by not having to be in the classroom so I can work on my other stuff.

• Um — I — the — more time because we won’t like be sitting in class so that way I can work like — I can work on it at midnight if I wanted to you know — so — yea it will be more flexible with my schedule.

• Um — well I like, I work well when it's my own schedule of time so that was one thing like I was excited about, I could do the projects when I need
to, whether its midnight or you know whatever time I can do it. So that I like a lot, that its at my own discretion. Because I don't have enough time to go to class and sit there for three hours everyday or whatever. So I like the fact that I can do it on my own time, I guess some of it I wish I had a little more guidance with, like here and there, just things I had never done before, but overall I think I'm getting the hang of it.

One student who had to withdraw from the same class taught by the same professor the quarter before due to surgery said that she decided to take the online class because it was the only one he was teaching and that when she asked him, he said that it would not really change that much from the class she had already taken and that she would not have to redo everything that she had already done.

Umm — I didn’t have any expectations because I did just want to take it with him umm — but I knew that I had a lot of assignments already done so I wouldn't have to spend as much time on the work...
Four students said that it would be both easier and less time-consuming.

- I thought it would be easier — well so, too much easier um — I thought the workload would be less because um — I could take the time that I'd be in class working on my assignment — so I won’t have class time and homework, you know what I mean. It will be more in — in the end it will be less time.

- Umm — with this one ah — I thought it would be easier because a lot of the assignments aren’t that hard if you were just to figure them out yourselves — its better than sitting in class and like listen on how to do something you already know how to do. Plus I’m taking seventeen hours too, so if I have a class that I don't have to go to, it just opens up more time.

- Um — I thought it would give me more time because I don’t really like to be in class so I thought it would be nice and I actually thought that the computer projects would be easier than they were. So I thought it was going to be easier.

- Easy. Less time spent on the class in general.
In a similar face-to-face class, students would have had to sit in class for four hours. In addition to these four hours, students would have had to spend more time that week working on assignments. In analyzing the amount of time students actually spent on the assignments, the researcher categorized the hours the students spent into two groups, namely, four hours or less, and more than four hours, in order to reflect the actual amount of time spent in the classroom (four hours) if this had been a face-to-face class. It was discovered that the majority of the students spent less than four hours on their assignments according to their answers given in the weekly journals. The students were asked the following question:

How many hours did you spend on your assignment?

In assignment one, one student spent more than four hours on this assignment. In assignment two, one student spent more than four hours on this assignment. In assignment three, no students spent more than four hours on this assignment. In assignment four, four students spent more than four hours on this assignment. In assignment five, no students spent more than four hours on this assignment. In assignment six, two students spent more than four hours on this assignment. In assignment seven, no students spent
more than four hours on this assignment. In assignment eight, no students spent more than two hours on this assignment. In assignment nine, none of the students spent more than four hours on this assignment. In assignment ten, ten students spent more than four hours on this assignment. In assignment eleven, two students spent more than four hours on this assignment. In assignment twelve, no students spent more than four hours on this assignment. The table below summarizes the actual amount of time the students spent on the assignments.
# Table 9

**Actual Amount of Time Students Spent on Assignments**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>4 hours or less</th>
<th>More than 4 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Story created in Microsoft Word</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>2. Flyer created in Microsoft Publisher</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>3. Weekly schedule created in Microsoft Word</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>4. Story created in KidPix</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td>5. Bookmarks created in Microsoft Word</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td>6. Presentation created in PowerPoint</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>7. Spreadsheet and graphs created in Microsoft Excel</td>
<td>27</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 9 (continued)

*Actual Amount of Time Students Spent on Assignments*

<table>
<thead>
<tr>
<th>Assignment</th>
<th>4 hours or less</th>
<th>More than 4 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. Lesson plan created in Microsoft Word</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>9. Evaluation of Web sites using the Web Evaluation Form</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>10. Personal Web page created in Microsoft FrontPage or other software</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td>11. QuickTime Movie created in iMovie or Camtasia</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>12. Evaluation of software using the Software Evaluation Form</td>
<td>26</td>
<td>0</td>
</tr>
</tbody>
</table>
The information from the above table revealed that students did actually spend less time than they would have if they had taken a face-to-face class. Their assumption that the class was easier and less time-consuming could be a reflection of the fact that taking an online class provides them with more control over their time. This time management factor may also have led to them seeking executive help rather than instrumental help.

From Whom Help was Sought

This component of research question one was answered through data collected from the weekly journals and the interviews. The theme that emerged was that the majority of the students sought informal help from their friends but formal help from their instructor. The researcher defines formal help as help that requires specialized training to solve the problem and informal help as help that does not require specialized training to solve the problem. This means that formal help can only be obtained from an expert and informal help can be obtained from someone who is not an expert in the field.

The researcher categorized assignments that required specialized help based on information obtained from the pilot study. The online class in the pilot study was
similar to the online class in the case study. All the assignments and course readings were identical in both studies. From observations and conversations with students in the pilot study, it was discovered that certain assignments could be categorized as needing specialized help. The specialized help required could only be provided by the researcher or the class instructor.

The majority of the students sought informal help from their friends but formal help from their instructor.

In the weekly journals, the students were asked a question with five subparts as follows:

Did you seek help in completing your assignment?

a. If yes, how much time did you spend on your assignment before seeking help?

b. If yes, whom did you ask for help?

c. If yes, did you ask for the answer or did you just ask for a hint so that you could complete it on your own? Describe the situation

d. If yes, was it a pleasant experience? Explain.

e. If yes, was it successful (i.e., did you get the help you needed)?
Data was collected from the second subpart to this question, i.e., if you had sought help for this assignment, whom did you ask for help?

In assignment one, the students had to write about themselves in Microsoft Word and insert their pictures. This assignment was very basic except for the picture which they had to insert in the Microsoft Word document. Students could either use a digital camera to take a picture of themselves or scan a picture that they already had. Ten students (N=28) asked for help in completing assignment one. Three of the ten students asked their friends for help.

- I had my friend help me who knows about computers.
- I asked a friend for help on how to get my picture on the computer, but in the end I figured it out for myself.
- The only help that I sought was from my friend in the building who took a picture of me with his digital camera for assignment one, my story.

One student asked her roommate who had already taken the class for help.

Another student asked a complete stranger who was sitting next to him in the computer lab.
Yes I did. I had a gentleman, who was working in the computer room, show me how to use a scanner.

One student asked someone in her class:

Yes, I asked someone that was in my class.

Four of the students who said they had sought help in completing assignment one did not provide an answer to subsection b. In other words, they did not reveal whom they had asked for help.

In assignment two, the students had to create a school event flyer for a field trip in Microsoft Publisher. Six students (N=22) asked for help in completing assignment two. Four of the six students asked their friends for help. One student looked at the Microsoft Web site for help.

I looked at the Microsoft website and through my textbook before starting, that was the only assistance I used.

Another student asked her Mom for help.

In assignment three, the students had to create a table in Microsoft Word that showed their daily schedules. The had to use the Table menu and merge cells. Five students (N=27) asked for help in completing assignment three. Three of the five students asked their friends for
help. One student asked her Mom and another student asked the lab assistant.

In assignment four, the students had to create an eight to ten slide short story for a child aged between 4 to 8 years old using KidPix. The completed work had to be saved as a QuickTime movie. Thirteen students (N=26) asked for help in completing assignment four. One of the thirteen students asked her friend for help. Another student asked the instructor. Two students asked a classmate. Two students asked the lab assistant for help. One student sought help from her notes.

I didn't ask anyone for help, I finally remembered that I had printed out the KidPix Notes, and I looked on there for help.

Another student looked at the Web site for help.

I looked at the help work sheets on Blackboard.

Two students asked strangers for help.

- A girl sitting next to me in the computer lab who was also working on EDCT 203 work.

- A person in the computer lab that was working on the same assignment.

Three of the thirteen students who asked for help asked more than one person for help. One student asked the
instructor and a friend. Another student asked a friend and a classmate. One student asked the lab assistant and the instructor.

In assignment five, the students had to read about some educational issues in Chapter 8 of their textbook and then they had to find a Web site on six of the 12 issues mentioned in the assignment. They had to write a summary of the contents of the Web site in one paragraph and create a bookmark at the end of the paragraph so that the Web site could be easily located. Four students (N=28) asked for help in completing assignment five. Two of the four students asked their friends for help. One student looked for help on the help forum whereas another asked the professor for help.

In assignment six, the students had to create a PowerPoint presentation regarding technology integration in the teaching and learning process. The students had to select one of the educational issues mentioned in their textbook and develop an eight to ten slide PowerPoint presentation. Three students asked for help (N=27) in completing assignment six. Two of the three students asked their friends for help. One of the students asked her roommate for help.
In assignment seven, the students had to use Microsoft Excel to create a spreadsheet and graphs. Seven students asked for help (N=25) in completing assignment seven. Five of the seven students asked their friends for help. One student asked her roommate for help and another student found help on her assignment sheet.

I went to the web page at the bottom of the paper with the assignment on it before I started.

In assignment eight, the students had to create a lesson plan for K-12 students. The aim of the lesson was to teach the K-12 students to create a spreadsheet and a graph in Microsoft Excel. Six students (N=26) asked for help in completing assignment eight. Three of the six students asked their friends for help. Two students asked their roommates for help and one student asked the professor for help.

I met with my professor to clarify some questions I had about the assignment.

In assignment nine, the students had to evaluate two Web sites that had content in their specific teaching areas. They had to use the Web evaluation form in the Course Document section of Blackboard 5.0. Nobody asked for help in completing assignment nine.
In assignment ten, the students had to create a Web site. The Web site then would have to be uploaded or published. Twenty-three students (N=27) asked for help in completing assignment ten. Three of the 23 students asked their friends for help. Thirteen of the students asked the instructor. One student asked her brother for help. Another student asked the lab technician in the lab.

Six of the thirteen students asked more than one person for help. Three of the students asked both friends and the instructors for help. One student asked a friend and the lab assistants. One student said:

I used all of the tutorials and sought help from friends.

Another student asked a man in the computer lab, the help forum, and the professor.

In assignment 11, the students had to create a short 2-minute movie and save it as a QuickTime movie. They could use the Digital camera from the Media Center to take ten pictures; they could scan ten pictures that they already had; or use ten pictures from the Internet. The pictures had to be related so that a movie could be created with a story line. Fifteen students (N=24) asked for help in completing assignment eleven. Three of the 15 students
asked their friends for help. Eight of the students asked the instructor for help. One student attempted to ask the professor:

I stopped by for office hours once but was unable to locate the instructor. Other than that, I did print out the tutorial that was on Blackboard.

One student asked her brother. Another student asked her boyfriend. One student asked both the lab assistant and a friend.

In assignment 12, the students had to check out a piece of software from the Media Center and evaluate the software using the Software Evaluation Form located under the Course Documents section of Blackboard 5.0. Two students (N=26) asked for help in completing assignment twelve. One of the two students asked her friend for help. The other student asked the instructor for help.

The table below summarizes the percentage of help sought from friends and instructors based on each assignment.
Table 10

*Percentage of Students who Sought Help from Friends and the Instructor*

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Requires Specialized Help in order to Solve the Problem</th>
<th>Percentage of Students who Sought Help from Friends</th>
<th>Percentage of Students who Sought Help from the Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Story created in Microsoft Word</td>
<td>No</td>
<td>30.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>2. Flyer created in Microsoft Publisher</td>
<td>No</td>
<td>66.67%</td>
<td>0.00%</td>
</tr>
<tr>
<td>3. Weekly schedule created in Microsoft Word</td>
<td>No</td>
<td>60.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
Table 10 (continued)

*Percentage of Students who Sought Help from Friends and the Instructor*

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Requires Specialized Help in order to Solve the Problem</th>
<th>Percentage of Students who Sought Help from Friends</th>
<th>Percentage of Students who Sought Help from the Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Story created in KidPix</td>
<td>No</td>
<td>23.08%</td>
<td>23.08%</td>
</tr>
<tr>
<td>5. Bookmarks created in Microsoft Word</td>
<td>No</td>
<td>50.00%</td>
<td>25.00%</td>
</tr>
<tr>
<td>6. Presentation created in PowerPoint</td>
<td>No</td>
<td>66.67%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
Table 10 (continued)

Percentage of Students who Sought Help from Friends and the Instructor

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Requires Specialized Help in order to Solve the Problem</th>
<th>Percentage of Students who Sought Help from Friends</th>
<th>Percentage of Students who Sought Help from the Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Spreadsheet and graphs</td>
<td>No</td>
<td>62.50%</td>
<td>0.00%</td>
</tr>
<tr>
<td>created in Microsoft Excel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lesson plan</td>
<td>No</td>
<td>50.00%</td>
<td>16.67%</td>
</tr>
<tr>
<td>created in Microsoft Word</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 10 (continued)

Percentage of Students who Sought Help from Friends and the Instructor

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Requires Specialized Help in order to Solve the Problem</th>
<th>Percentage of Students who Sought Help from Friends</th>
<th>Percentage of Students who Sought Help from the Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Evaluation of Web sites using the Web Evaluation Form</td>
<td>No</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>10. Personal Web page created in Microsoft FrontPage or other software</td>
<td>Yes</td>
<td>29.17%</td>
<td>70.83%</td>
</tr>
</tbody>
</table>
Table 10 (continued)

Percentage of Students who Sought Help from Friends and the Instructor

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Requires Specialized Help in order to Solve the Problem</th>
<th>Percentage of Students who Sought Help from Friends</th>
<th>Percentage of Students who Sought Help from the Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. QuickTime Movie created in iMovie or Camtasia</td>
<td>Yes</td>
<td>26.67%</td>
<td>53.33%</td>
</tr>
<tr>
<td>12. Evaluation of software using the Software Evaluation Form</td>
<td>No</td>
<td>50.00%</td>
<td>50.00%</td>
</tr>
</tbody>
</table>
For most of the assignments that were easier and did not require specialized training to solve, students preferred to ask their friends for help. This is true of assignments one, two, three, six, seven, and nine where students did not ask for help from their instructor at all. Help seeking here could be time-driven as it is faster and easier to ask friends for help rather than the instructor of the course.

For assignment four, which caused 84.62% of the students to be frustrated, the split between help sought from friends and from the instructor was even. Twenty-three point zero eight percent asked their friends and 23.08% asked the instructors. Some students asked both the instructor and their friends for help. When students were asked if they had used KidPix in the demographic questionnaire, only one student or 3.57% admitted that he or she had used it before. Twenty seven students or 96.43% had not used the software before. This assignment does not require specialized help as KidPix is not too difficult to figure out if you are diligent and are willing to spend some time familiarizing yourself with the software. Students who were not willing to put in the time to familiarize themselves with the software or who were not
willing to read the instructions and the tutorials, asked
the instructor for help.

For assignments 10 and 11, students believed that the
instructor of the class would be the best person to ask for
help as the help needed was more specialized in nature. In
assignment ten, the students had to create a Web site and
upload it. In assignment 11 the students had to create a
short 2-minute movie and save it as a QuickTime movie.

When Help Was Sought

This component of research question one was
investigated through data collected from the weekly
journals. The theme that emerged was that students sought
help almost immediately.

Students sought help almost immediately.

In the weekly journals, the students were asked a
question with five subparts as follows:

Did you seek help in completing your assignment?

a. If yes, how much time did you spend on your
assignment before seeking help?

b. If yes, whom did you ask for help?

c. If yes, did you ask for the answer or did you
just ask for a hint so that you could complete it
on your own? Describe the situation
d. If yes, was it a pleasant experience? Explain.

e. If yes, was it successful (i.e., did you get the help you needed)?

Data was collected from the first subpart to this question, i.e., if you had sought help for this assignment, how much time did you spend on your assignment before seeking help?

The table below summarizes the time spent on the assignments before students sought help.
<table>
<thead>
<tr>
<th>Assignment</th>
<th>1 hour or less</th>
<th>More than 1 hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Story created in Microsoft Word</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>2. Flyer created in Microsoft Publisher</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3. Weekly schedule created in Microsoft Word</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4. Story created in KidPix</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>5. Bookmarks created in Microsoft Word</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>6. Presentation created in PowerPoint</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Spreadsheet and graphs created in Microsoft Excel</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>8. Lesson plan created in Microsoft Word</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 11 (continued)

Amount of Time Spent on the Assignments Before Students Sought Help

<table>
<thead>
<tr>
<th>Assignment</th>
<th>1 hour or less</th>
<th>More than 1 hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Evaluation of Web sites using the Web Evaluation Form</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10. Personal Web page created in Microsoft FrontPage or other software</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>11. QuickTime Movie created in iMovie or Camtasia</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>12. Evaluation of software using the Software Evaluation Form</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
For assignments 1, 2, 3, 4, 5, 7, 8, and 12, the majority of students asked for help before starting the assignment or after working on it for an hour or less. For assignments 6, 10, and 11, the majority of the students asked for help after more than an hour. This shows that for eight of the 12 assignments, the majority of the students sought help early. Only for assignments 6, 10, and 11 did the students seek help later (i.e., after working on it for more than an hour). Students did not seek help for assignment 9. Help seeking then could be a time-driven issue as students were not willing to spend too much time on the assignments before seeking help.

Research Question Two

This research question was broken down into two components, namely, the level of self-esteem of the students and the relationship of self-esteem to help seeking in an online learning environment.

The Level of Self-Esteem of the Students

This component was investigated through one of the standardized tests, namely, Good-L and Good-K's (n.d.) A Measure of Self-Esteem (see Appendix D) and through the interviews. The themes that emerged were:
1. The majority of the students were correct in their self-analysis of their level of self-esteem.

2. Two types of self-esteem were identified, namely, academic self-esteem and social self-esteem.

On the first day of class, Good-L and Good-K's (n.d.), *A Measure of Self-Esteem*, was given to the students. The test consisted of 27 true-false items to measure the students' level of self-esteem. The scale is for an adult population.

According to Good-L and Good-K's (n.d.) manual for the questionnaire, each item was scored in the direction of high self-esteem based on the true and false answers (see Appendix H).

In order to analyze the scores that students received on this standardized test, the students were given a point for each answer that matched the answer provided in the answer key. The researcher then divided the scores into three clusters for ease of comparison between answers given in the standardized test and the answers given in the interview. A score of 19 to 27 was considered a high score, a score of 10 to 18 was considered a middle score, and a score of 0 to 9 was considered a low score.
Twenty-seven students completed this standardized test on the first day of class. Seventeen students or 62.96% received a high score reflecting high self-esteem. Eight students or 29.63% received a middle score reflecting a medium level of self-esteem. Two students or 7.41% received a low score reflecting low self-esteem.

Of the 27 students who agreed to be interviewed, 19 students or 70.04% admitted to having high self-esteem when asked if they would consider themselves as having high or low self-esteem. Five students or 18.52% said they had medium self-esteem. Three students or 11.11% actually differentiated between academic self-esteem and social self-esteem. Their answers on whether they had high or low self-esteem reflected their perception of there being more than one type of self-esteem. One student said she had low academic self-esteem but high social self-esteem. When asked if she considered herself as having high or low self-esteem, she asked the researcher in return:

According to school or just in general?

When asked if she would separate the two and if there was such a thing as academic self-esteem, she replied:

Yeah I would say so — I'm very comfortable socially
but I definitely — is taken me a while to get my
academic confidence I guess you would say — I would say pretty confident in it.

The researcher then asked:

So you said that your social self-esteem is higher than your academic self-esteem?

To which she replied:

Yeah — definitely.

Another student said she had higher academic self-esteem than social self-esteem. She immediately separated academic self-esteem from social self-esteem. She said:

I would say with academic stuff I have high self-esteem cause I always um — find a lot of success in academics so ummm...

The third student said that she usually has high academic self-esteem but it was low at the moment.

Um — like when I do my homework in my class? Um — one I’m having high but then right now its kinda low cause it's all new material to me and I don’t, I feel like I don’t know anything. So right now it's going kind of low.

As her answer reflected a reference to academic self-esteem, the researcher then asked her if she separated academic self-esteem from social self-esteem and she
replied in the affirmative. When asked what her level of social self-esteem was, she said that it was high.

_The majority of the students were correct in their self-analysis of their level of self-esteem._

Comparing the actual scores that the students received in *A Measure of Self-Esteem* to their answers in the interviews, it was discovered that out of the 24 students who answered the question, "Would you consider yourself as having high or low self-esteem?", in the interviews with either a high, medium, or low level of self-esteem, 16 students displayed consistency in their answers to both the standardized test and the interview question. Fourteen of the 16 students had high scores on the standardized test and also alleged that their self-esteem was high when interviewed. Two students had medium scores on the standardized test and admitted that their level of self-esteem was not too high and not too low (i.e., somewhere in the middle).

Eight students had scores that did not correlate with their answers to the interview question. Two students who had high scores on the standardized test actually said that their level of self-esteem was somewhere in the middle when interviewed. Four students who had medium scores on the
standardized test said that their self-esteem was high. One student who had a low score on the standardized test said:

   I think in the middle — I don’t have high — and I don’t have low — there are some days where I am like blah — and I don’t even wanna leave my room — but I’m like, in the middle.

Another student who had a low score on the standardized test said that she had high self-esteem when interviewed.

The majority of the students were correct in their assumption of their level of self-esteem. The level of self-esteem they admitted to in the interviews matched the scores they received on the standardized test.

   Two types of self-esteem were identified, namely, academic self-esteem and social self-esteem.

As data analysis was an ongoing process and occurred during data collection, the finding that some students identified two different types of self-esteem led the researcher to devise a follow-up questionnaire that only asked them the following questions:

1. On a scale of 1 to 10, 1 being low and 10 being high, how would you rate your level of self-esteem?
2. Do you believe that there are different types of self-esteem (e.g. academic self-esteem and social self-esteem)?
   
   a. If yes, on a scale of 1 to 10, 1 being low and 10 being high, how would you rate your academic self-esteem?
   
   b. If yes, on a scale of 1 to 10, 1 being low and 10 being high, how would you rate your social self-esteem?

The follow-up questionnaire was handed out to the students on the last day of class. It was also sent out via e-mail to all the students in the class. A follow-up e-mail was sent to all the students a week later. Only 24 students returned the questionnaire to the researcher.

Out of the 24 students, 23 or 95.83% believed that there were different types of self-esteem, namely, academic self-esteem and social self-esteem. When asked to rate themselves on their academic self-esteem and their social self-esteem on a scale of 1 to 10, 1 being low and 10 being high, 11 students or 47.83% rated themselves as having higher social self-esteem than academic self-esteem. Five students or 21.74% rated themselves as having higher academic self-esteem than social self-esteem. Seven
students or 30.43% rated themselves as having equal academic and social self-esteem. In comparing the answers to this question to their answers to the first question asked in the follow-up questionnaire (i.e., "On a scale of 1 to 10, 1 being low and 10 being high, how would you rate your level of self-esteem?") five students or 21.74% associated their academic self-esteem to their overall self-esteem. This means that they gave the same rating for both their academic self-esteem and their overall self-esteem but gave a different rating for their social self-esteem. Four students or 17.39% associated their social self-esteem to their overall self-esteem. This means that they gave the same rating for both their social self-esteem and their overall self-esteem, but gave a different rating for their academic self-esteem. Four students or 17.39% believed that their academic, social and overall self-esteem were at the same level. They gave the same ratings for all three. Seven students or 30.43% said that their overall self-esteem was somewhere in between their academic and social self-esteem. Two students or 8.70% said that their overall self-esteem was higher than either their academic or social self-esteem. One student or 4.35% said that his or her overall self-esteem was lower than either
his or her academic or social self-esteem. The table below shows a comparison of the level of overall, academic and social self-esteem of the students.

Table 12
Level of Overall, Academic and Social Self-Esteem of the Students who Believed that There were Two Types of Self-Esteem

<table>
<thead>
<tr>
<th>No.</th>
<th>Overall Self-Esteem</th>
<th>Academic Self-Esteem</th>
<th>Social Self-Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>8</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2.</td>
<td>8</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>3.</td>
<td>10</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>10</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>5.</td>
<td>10</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>6.</td>
<td>8.5</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>7.</td>
<td>8</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>8.</td>
<td>7</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9.</td>
<td>4</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>10.</td>
<td>9</td>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>
Table 12 (continued)

Level of Overall, Academic and Social Self-Esteem of the Students who Believed that There were Two Types of Self-Esteem

<table>
<thead>
<tr>
<th>No.</th>
<th>Overall Self-Esteem</th>
<th>Academic Self-Esteem</th>
<th>Social Self-Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.</td>
<td>7</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>12.</td>
<td>5</td>
<td>8 or 9</td>
<td>4 or 5</td>
</tr>
<tr>
<td>13.</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>14.</td>
<td>8 - 9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>15.</td>
<td>7</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>16.</td>
<td>8</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>17.</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>18.</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>19.</td>
<td>8</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>20.</td>
<td>7</td>
<td>8</td>
<td>4 or 5</td>
</tr>
<tr>
<td>21.</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>22.</td>
<td>7</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>23.</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>
Only one student or 4.17% believed that there was only one type of self-esteem. This student said:

I think self-esteem is the way a person feels about theirself as a whole.

**The Relationship of Self-Esteem to Help Seeking**

The relationship of self-esteem to help seeking was investigated through the analysis of data obtained from the interviews. The theme that emerged was that the majority of the students were open to seeking help regardless of their level of self-esteem.

*The majority of the students, regardless of their level of self-esteem, were open to seeking help.*

In the interview, the students were asked the following:

Would you consider yourself as having high or low self-esteem? How has this affected your help seeking behavior? Has it made you more open to seeking help or less open?

Of the 27 students who agreed to be interviewed, 19 students or 70.04% admitted to having high self-esteem. All 19 students were open to seeking help. Fifteen of the 19 students believed that having high self-esteem made them more open to seeking help. Two of the nineteen students
were more open to seeking help but preferred to work on the assignment first.

- Ah — I'd say if I need help like — if something that I can figure out on my own, than I’ll do it on my own but if it’s something that I have no idea about — and then I'd rather ask somebody else for help — so I’ll seek help.

- Umm — I think — I’m pretty open to seeking help, I don’t know I'm pretty like independent though, like I can usually like — I'll just take more time to figure things out on my own if I can but if I know that I am not going to be able to figure stuff out I'll go ask for help. But usually I'll just try to work through it for a while by myself before I ask for help.

The other two students had such a high self-confidence in their abilities to solve the problem themselves that they believed that they could work through the problems on their own. If need be, they would still be willing to seek help.

- I think I have enough confidence that I think that I can figure it out by myself may be...
• Probably negatively effects help seeking behavior because I have a high self-efficacy and believe in myself. I want to figure it out on my own so I choose that route. I am not afraid to ask for help if I really need it but I prefer not to.

Five students or 18.52% said they had medium self-esteem. All five students said that they were open to seeking help. Three of these five students were open to seeking help only if needed. One student said it depended on the situation.

Um — it depends on the situation if like its a situation where — I feel that I should know it and I’m like the only one that does not know it — I’m more self-conscious of asking for help but if the situation is where like hardly anyone understands it then I don’t feel bad asking for help..

Another student said she does not like asking for help but will do so if and when needed.

I don’t think it has an effect on me really — like having me ask help or anything but I’m a perfectionist so I will like do something myself before asking for
help and I hate when I ask for help but if I have to
do it then I will do it...
The third student said that she has not needed to ask for
help yet but would do so if the need arose.

Um, well, since I haven’t really had trouble with
things, I haven’t needed to ask but if I did I would
ask for help.

Three students or 11.11% actually differentiated
between academic self-esteem and social self-esteem. One
student said that she had higher social self-esteem than
academic self-esteem. When asked if her low level of
academic self-esteem had affected her help-seeking behavior
and if it had made her more open to seeking help or less
open, she said:

Um — well to be completely honest — I’m not, not a
real school kind of person, so I think the only way I
have made it through three years of college is from
asking help and meeting with the Professors because I
don’t do the whole — I just — I need help with a lot
of things and I’m pretty comfortable with class I mean
the Professors know me pretty well [laugh] — I am okay
with it [laugh].
Another student admitted to having higher academic self-esteem than social self-esteem. When asked if this made her more open to seeking help, she replied:

I think I'm also kinda stubborn person and would wanna figure it out on my own but I will — but um — I’ll seek help before just turning in something that's kinda just a piece of crap — either seek help or turn in something that well, you know is junk, I will seek help. Generally speaking.

When asked the same question, the third student said that she usually has high academic self-esteem but it was low at the moment because all the material was new and she did not know anything. She considered her social self-esteem as being high. She said that she was very open to seeking help if she needed it regardless of her present level of self-esteem. This shows that the majority of the students who had either high or medium self-esteem were open to seeking help if and when they needed it.

Research Question Three

This research question was broken down into two components, namely, the self-regulated learning strategies of the students and the learning strategies used by the students in the online learning environment.
The Self-Regulated Learning Strategies of the Students

The self-regulated learning strategies of the students was investigated through interview questions. Data from the interview questions was coded using the categories in the Cognitive and Metacognitive Strategies of the Learning Strategies Scales of the second standardized test, namely, Pintrich et al.’s (1991) Motivated Strategies for Learning Questionnaire (MSLQ) (see Appendix E). The theme that emerged from this was that only half the students used higher level learning strategies.

The MSLQ is an 81 item, 7-point Likert scale test that was administered to the students on the first day of class. The 81 items are grouped into two sections with a total of 15 scales.

The first section is the Motivational Scales. Thirty-one items test motivation. This section is divided into three components. The first component is the Value Component. The subsections under this component are Intrinsic Goal Orientation, Extrinsic Goal Orientation, and Task Value. The second component is the Expectancy Component. The subsections under this component are Control of Learning Beliefs and Self-Efficacy for Learning and Performance. The third component is the Affective
Component. The subsection under this component is Test Anxiety.

The second section is the Learning Strategies Scales. Thirty-one items test learning strategies, and 19 items test student management of different resources. The learning strategies scales section is divided into two components. The first component is Cognitive and Metacognitive Strategies. The subsections under this component include Rehearsal, Elaboration, Organization, Critical Thinking, and Metacognitive Self-Regulation. The second component is Resource Management Strategies. The subsections under this component include Time and Study Environment, Effort Regulation, Peer Learning, and Help Seeking.

According to the MSLQ Manual (Pintrich et al., 1991), "Students rate themselves on a seven point Likert scale from 'not at all true of me' to 'very true of me'. Scales are constructed by taking the mean of the items that make up that scale" (Pintrich et al., p. 5). A rating of one on the Likert scale reflects 'not at all true of me' and a rating of seven reflects 'very true of me'. The items are grouped together in the following manner (See Appendix E):
Table 13

Motivational Scales of the MSLQ

<table>
<thead>
<tr>
<th>Motivational Scales</th>
<th>Value Component</th>
<th>Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intrinsic Goal Orientation</td>
<td>1,16,22,24</td>
</tr>
<tr>
<td></td>
<td>Extrinsic Goal Orientation</td>
<td>7,11,13,31</td>
</tr>
<tr>
<td></td>
<td>Task Value</td>
<td>4,10,17,23,26,27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Expectancy Component</th>
<th>Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control of Learning Beliefs</td>
<td>2,9,18,25</td>
</tr>
<tr>
<td></td>
<td>Self-Efficacy for Learning and Performance</td>
<td>5,6,12,15,20,21,29,31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Affective Component</th>
<th>Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Test Anxiety</td>
<td>3,8,14,19,28</td>
</tr>
</tbody>
</table>
Table 14

*Learning Strategies Scales of the MSLQ*

<table>
<thead>
<tr>
<th>Learning Strategies Scales</th>
<th>Question Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive and Metacognitive Strategies</strong></td>
<td></td>
</tr>
<tr>
<td>Rehearsal</td>
<td>39, 46, 59, 72</td>
</tr>
<tr>
<td>Elaboration</td>
<td>53, 62, 64, 67, 69, 81</td>
</tr>
<tr>
<td>Organization</td>
<td>32, 42, 49, 63</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>38, 47, 5166, 71</td>
</tr>
<tr>
<td>Metacognitive Self-Regulation</td>
<td>33, 36, 41, 44, 54, 55, 56, 57, 61, 76, 78, 79</td>
</tr>
<tr>
<td><strong>Resource Management Strategies</strong></td>
<td></td>
</tr>
<tr>
<td>Time and Study Environment</td>
<td>35, 43, 52, 65, 70, 73, 77, 78, 80</td>
</tr>
<tr>
<td>Effort Regulation</td>
<td>37, 48, 60, 74</td>
</tr>
<tr>
<td>Peer Learning</td>
<td>34, 45, 50</td>
</tr>
<tr>
<td>Help Seeking</td>
<td>40, 58, 68, 75</td>
</tr>
</tbody>
</table>
In creating the MSLQ the researchers were making a quantitative test of the theory for each section of the MSLQ.

...for example, we have four items that we assume to be indicators of a construct called "Intrinsic Goal Orientation". The confirmatory factor analysis tests how closely the input correlations can be reproduced given the constraints that items 1, 16, 22, and 24 fall onto one specific factor. There are four items we are assuming to tap into a factor called "Extrinsic Goal Orientation"; six items for "Task Value" and so forth (Pintrich et al., 1991, p. 79).

Pintrich et al. (1991) ran two confirmatory analyses to test for the factor validity of the MSLQ. One set of the confirmatory analyses was used to test the motivational items and the second set was used to test the cognitive and metacognitive strategy items.

Lisrel VI (Joreskog & Sorborn, 1986) was used to estimate and test our models. In contrast to exploratory factor analysis, confirmatory factor analysis requires the researcher to indicate which items (indicators) should fall onto which factors (latent variables). Parameter estimates for the model
specified are generated, and tests for goodness of fit are made. The goodness of fit tests assess how well correlations reproduced given the model specified "match up" with the input set of correlations (Pintrich et al., 1991, p. 79).

Some of the items are reverse coded. The ratings for these items have to be reversed before the score is computed. A rating of one on a reverse coded item would have to be computed as a seven. A rating of two would be computed as a six. A rating of three would be computed as a five. A rating of four would remain a four. A rating of five would be computed as a three. A rating of six would be computed as a two. A rating of seven would be computed as a one. Only the Cognitive and Metacognitive Strategies and Resource Management Strategies section of the Learning Strategies Scales contained items that were reverse coded (see Appendix I).
Only half the students used higher level learning strategies.

Twenty-seven students were interviewed during the last three weeks of the quarter for about 45 minutes (See Appendix G). Standardized open-ended interviews were conducted to ensure that respondents answered the same questions in the same order. This increases the comparability of the responses and ensures that data is collected on the main topics (Tuckman, 1972). In the interviews, the students were asked what learning strategies they used in a face-to-face classroom and if taking an online class had changed the learning strategies they used.

Students' answers in the interviews were coded according to the five subsections of the Cognitive and Metacognitive Strategies of the Learning Strategies Scales. The five subsections are Rehearsal, Elaboration, Organization, Critical Thinking, and Metacognitive Self-Regulation. Students' answers were analyzed according to Pintrich et al.'s (1991) definition of these five categories as follows:

Basic rehearsal strategies involve reciting or naming items from a list to be learned. These strategies are
best used for simple tasks and activation of information in working memory rather than acquisition of new information in long-term memory. These strategies are assumed to influence the attention and encoding processes, but they do not appear to help students construct internal connections among the information or integrate the information with prior knowledge (Pintrich et al., 1991, p. 19). Elaboration strategies help students store information into long-term memory by building internal connections between items to be learned. Elaboration strategies include paraphrasing, summarizing, creating analogies, and generative note-taking. These help the learner integrate and connect new information with prior knowledge (Pintrich et al., 1991, p. 20). Organization strategies help the learner select appropriate information and also construct connections among the information to be learned. Examples of organizing strategies are clustering, outlining, and selecting the main idea in reading passages. Organizing is an active, effortful endeavor, and results in the learner being closely involved in the
task. This should result in better performance (Pintrich et al., 1991, p. 21).

Critical thinking refers to the degree to which students report applying previous knowledge to new situations in order to solve problems, reach decisions, or make critical evaluations with respect to standards of excellence (Pintrich et al., 1991, p. 22).

Metacognition refers to the awareness, knowledge, and control of cognition. We have focused on the control and self-regulation aspects of metacognition on the MSLQ, not the knowledge aspect. There are three general processes that make up metacognitive self-regulatory activities: planning, monitoring, and regulating. Planning activities such as goal setting and task analysis help to activate, or prime, relevant aspects of prior knowledge that make organizing and comprehending the material easier. Monitoring activities include tracking of one's attention as one reads, and self-testing and questioning: these assist the learner in understanding the material and integrating it with prior knowledge. Regulating refers to the fine-tuning and continuous adjustment of one's
cognitive activities. Regulating activities are assumed to improve performance by assisting learners in checking and correcting their behavior as they proceed on a task (Pintrich et al., 1991, p. 23).

The students' answers in the interviews ranged from repetition, reading the book before class, taking notes, reading over the notes, summarizing, making a list, making a study sheet or a study guide, highlighting important points, underlining important points, outlining, relating to other things, use of background knowledge, planning, monitoring and regulation.

Repetition and reading the book before class were categorized as Rehearsal strategies. Taking notes, reading over their notes, and summarizing were categorized as Elaboration strategies. Making a list, making a study sheet or a study guide, highlighting important points, underlining important points, and outlining were categorized as Organizational strategies. Relating information they read to other things was categorized as Critical Thinking Skills. Planning, monitoring, and regulation were categorized as Metacognitive Self-Regulation Strategies. The researcher then divided these five learning strategies into two further categories.
Rehearsal, Elaboration, and Organization were categorized as basic learning strategies. Critical Thinking and Metacognitive Self-Regulation Strategies were categorized as higher level learning strategies. This categorization was based on the definitions of two types of learning strategies, that is, deep learning and surface learning.

A deep learning strategy is directed at understanding the meaning of a task and to satisfy curiosity. A student using the deep will put in longer study hours, make detailed notes from the text and class Web site, do exercises in addition to meeting the minimum assignments, and will study continually rather than cram (Vermunt, 1995). It may be considered the highest form of learning. A surface learning strategy, on the other hand, is directed to memorizing facts, disjointed pieces of data, examples and illustrations (Hoeksema, 1995). "A student using the surface strategy will have a reproducing orientation trying to memorize pieces of information and more interested in getting good grades without having to fully master the material" (Sankaran & Bui, 2001, p. 192).
Higher level learning strategies were associated with deep learning and basic learning strategies were associated with surface learning.

Only twenty-six students were asked and responded to this question in the interview. Thirteen students or 50% used basic learning strategies of Rehearsal, Elaboration, and Organization. Thirteen students or 50% used both basic learning strategies and the higher level learning strategies of Critical Thinking and Metacognitive Self-Regulation. This shows that only half the students used higher level learning strategies. The other half used only basic learning strategies in order to hand in assignments on time and get a good grade.

*Learning Strategies Used in the Online Learning Environment*

The learning strategies used by the students in the online learning environment were investigated through the interviews. The theme that emerged was that the majority of the students used the same learning strategies in the online environment as in a face-to-face environment.
The majority of the students used the same learning strategies in the online learning environment as in a face-to-face environment.

During the interview process, the students were asked if taking an online class had changed the learning strategies they used in a face-to-face class. Sixteen students (N=27) or 59.26% who were interviewed said that taking an online class had not changed the learning strategies that they normally used in a face-to-face class. Ten students or 37.04% said that taking an online class had changed their learning strategies. One student or 3.70% said he or she didn't know.

I don’t see - I don’t know because this class is completely different than history you know - is - besides the books, so I haven’t really had to read anything - but its boring - just like this is the assignment you know - if you need help like - its always there or it gives you options - things like that - but a - I think it’s just a completely different type of class where - yeah it’s more like you just need to sit down and do it - I mean - the directions are right there - that’s what my project
type thing is whereas history is just reading and stuff like that...

This finding implies that the majority of the students used the same learning strategies that they normally used in a face-to-face class. If the students took notes in a face-to-face class, then they took notes in the online class from their readings. If they asked the Professor questions in class, then they asked the Professor questions via e-mail. Although the learning strategies remained the same, the form it took changed. The students adapted the learning strategies to fit the medium.

Summary

This chapter provided the findings of the case study. The findings were discussed in terms of the themes that emerged from each of the three research questions. In investigating the first research question, i.e., "What types of help are sought, from whom help is sought, and when is help sought in an online environment", the following themes were discovered:

Theme One: The Majority of the Students Sought Executive Help

Theme one was discovered through data collected from the weekly journals. Students were asked if they had sought
help for the assignment and if they had, did they ask for the answer or did they just ask for a hint so that they could complete the assignment on their own. Asking for the answer revealed that they were seeking executive help. Asking for a hint revealed that they were seeking instrumental help. It was found that the majority of the students sought executive help for almost every assignment.

Theme Two: The Majority of the Students were Frustrated with their Inability to Complete the Assignments without Help

Theme two was discovered through data collected from the weekly journals. Analysis of the data revealed that more than 50% of the students were frustrated in trying to complete seven of the 12 assignments on their own without help. More than 80% of the students were frustrated in trying to complete assignments four and ten. In assignment four, the students had to create an eight to ten slide short story on KidPix. In assignment ten, the students had to create a Web site.

Theme Three: The Majority of the Students Assumed that an Online Class is Easier and less Time-Consuming

Theme three was discovered through data collected from the interview. When asked what their expectations of taking
an online class were, the majority of the students stated that the online class would be either easier, less time-consuming, or both easier and less time-consuming.

**Theme Four: The Majority of the Students Sought Informal Help from their Friends but Formal Help from their Instructor**

Theme four was discovered through data collected from the weekly journals. The researcher defined informal help as help that did not require specialized training to solve the problem and informal help as help that required specialized training to solve the problem. For most of the assignments that were easier and did not require specialized training to solve, students preferred to ask their friends for help. For assignments 10 and 11, students believed that the instructor of the class would be the best person to ask for help as the help needed was more specialized in nature.

**Theme Five: Students Sought Help Almost Immediately**

Theme five was discovered through the analysis of data from the weekly journals. When asked how much time they spent on an assignment before seeking help, the majority of the students reported seeking help before starting the assignment or after working on it for an hour or less for
most of the assignments. Only for assignments 6, 10, and 11 did the students seek help later (i.e., after more than an hour).

In investigating the second research question (i.e., "What is the relationship of self-esteem to help seeking in an online environment"), the following themes were discovered:

**Theme Six: The Majority of the Students were Correct in their Self-Analysis of their Level of Self-Esteem**

Theme six was discovered through comparison of data from the standardized test, namely, Good-L and Good-K's (n.d.) *A Measure of Self-Esteem* and the answers provided by the students in the interview. The majority of the students were correct in their assumption of their level of self-esteem. The level of self-esteem they admitted to in the interviews matched the scores they received on the standardized test.

**Theme Seven: Two Types of Self-Esteem were Identified, Namely, Academic Self-Esteem and Social Self-Esteem**

Based on the answers of three students to the interview question that asked them what their level of self-esteem was, it was discovered that these three students believed that there was more than one type of
self-esteem. A follow-up questionnaire was then devised and given to the students at the end of the quarter. It was discovered that 95.83% of the students believed that there were different types of self-esteem, namely, academic self-esteem and social self-esteem. Forty-seven point eight three percent rated themselves as having higher social self-esteem than academic self-esteem. Twenty-one point seven four percent rated themselves as having higher academic self-esteem than social self-esteem. Twenty-one point seven four percent rated themselves as having equal academic and social self-esteem.

Theme Eight: The Majority of the Students, Regardless of their Level of Self-Esteem, were Open to Seeking Help

Theme eight was discovered through the analysis of data from the interviews. Nineteen students or 70.04% admitted to having high self-esteem (N=27). All nineteen students believed that having high self-esteem made them more open to seeking help. Five students or 18.52% said they had medium self-esteem. All five were open to seeking help. Three students or 11.11% actually differentiated between academic self-esteem and social self-esteem. One student said she had higher social self-esteem than academic self-esteem. Another said that she had higher
academic self-esteem than social self-esteem. The third student said that she had high academic and high social self-esteem. All three students were open to seeking help when needed. This shows that the majority of the students were open to seeking help if and when they needed it regardless of their level of self-esteem.

In investigating the third research question (i.e., "What is the relationship of self-regulated learning to an online learning environment"), the following themes were discovered:

Theme Nine: Only Half the Students Used Higher Level Learning Strategies

Theme nine was investigated through the interviews. In the interviews, the students were asked what learning strategies they used in a face-to-face classroom and if taking an online class had changed the learning strategies they used. Students' answers in the interviews were coded according to the five subsections of the Cognitive and Metacognitive Strategies of the Learning Strategies Scales of the second standardized test, namely, Pintrich et al.'s (1991) Motivated Strategies for Learning Questionnaire (MSLQ). The five subsections are Rehearsal, Elaboration, Organization, Critical Thinking, and Metacognitive Self-
Regulation. Students' answers were analyzed according to Pintrich et al.'s (1991) definition of these five categories. The researcher then divided these five learning strategies into two further categories. Rehearsal, Elaboration, and Organization were categorized as basic learning strategies. Critical Thinking and Metacognitive Self-Regulation Strategies were categorized as higher level learning strategies. This division was based on the definitions of two types of learning strategies, that is, deep learning and surface learning. It was discovered that thirteen students or 50% (N=26) used basic learning strategies of Rehearsal, Elaboration, and Organization. Thirteen students or 50% used both basic learning strategies and the higher level learning strategies of Critical Thinking and Metacognitive Self-Regulation. This shows that only half the students used higher level learning strategies. The other half used only basic learning strategies in order to hand in assignments on time and get a good grade.
Theme Ten: The Majority of the Students Used the Same Learning Strategies in the Online Learning Environment as in a Face-to-Face Environment

Theme ten was investigated through data obtained from the interviews. In each interview, the students were asked if taking an online class had changed the learning strategies they used in a face-to-face class. Sixteen students (N=27) or 59.26% who were interviewed said that taking an online class had not changed the learning strategies that they normally used in a face-to-face class. Ten students or 37.04% said that taking an online class had changed their learning strategies. One student or 3.70% said that he or she did not know as this was a completely different type of online class than the one he or she had taken before. This implies that the majority of the students did not change their learning strategies to fit an online environment.
CHAPTER FIVE

Discussion and Recommendations

This chapter discusses the findings of this case study and provides recommendations for future research inquiries. The chapter is divided into three main sections. The first section discusses each research question and the themes that were discovered for each question. The theories that emerged in the form of themes are compared to existing literature in order to examine the similarities and/or differences. "Overall, tying the emergent theory to existing literature enhances the internal validity, generalisability, and theoretical level of the theory building from case study research" (Eisenhardt, 1989, p. 545). The second section discusses the implications and recommendations for future research. This chapter also provides a discussion of other findings not directly related to the research questions but having an impact on help seeking in an online computer class. The third section provides the researcher’s thoughts and closing remarks.

This case study examined the help seeking behaviors of college students taking an online class at a large residential Midwestern university. Qualitative research in the form of a single-site embedded design case study formed
the methodological framework of this research. An embedded design investigates the subunits of the phenomena under study. "When an embedded design is used, each individual case study may in fact include the collection and analysis of highly quantitative data, including the use of surveys within each case" (Yin, 1984, p. 53).

The questions addressed in this study were:

1. What types of help are sought, from whom help is sought, and when is help sought in an online environment.

2. What is the relationship of self-esteem to help seeking in an online learning environment.

3. What is the relationship of self-regulated learning to an online learning environment.

To investigate the above research questions, this case study employed in-depth interviews, questionnaires, two standardized tests, weekly journals, and focus groups. Ten themes emerged from the data. The themes are:

1. The majority of the students sought executive help.

2. The majority of the students were frustrated with their inability to complete the assignment without help.
3. The majority of the students assumed that an online class is easier and less time-consuming.

4. The majority of the students sought informal help from their friends, but formal help from their instructor.

5. Students sought help almost immediately.

6. The majority of the students were correct in their self-analysis of their level of self-esteem.

7. Two types of self-esteem were identified, namely, academic self-esteem and social self-esteem.

8. The majority of the students, regardless of their level of self-esteem, were open to seeking help.

9. Only half the students used higher level learning strategies.

10. The majority of the students used the same learning strategies in the online learning environment as in a face-to-face environment.

Discussion of the Research Questions

The ten themes discovered in this case study are discussed in conjunction with the research questions.
Research Question One

Research question one asked the following:

What types of help are sought, from whom help is sought, and when is help sought in an online environment.

Three subcomponents were identified. These included types of help sought, from whom help was sought, and when help was sought. The following five themes emerged from the three subcomponents:

1. The majority of the students sought executive help.
2. The majority of the students were frustrated with their inability to complete the assignment without help.
3. The majority of the students assumed that an online class is easier and less time-consuming.
4. The majority of the students sought informal help from their friends but formal help from their instructor.
5. Students sought help almost immediately.

The five themes above can be categorized as having a core theme of time. For the first theme, the majority of the students sought executive help as it was faster. For the second theme, the majority of the students were frustrated
with their inability to complete the assignment without help as it would take too much time to seek help. For the third theme, the majority of the students assumed that an online class is easier and less time-consuming even though they were warned in the syllabus that an online class was not easier or less time-consuming than a regular face-to-face class. For the fourth theme, the majority of the students sought informal help from their friends but formal help from their instructor. This reveals that the majority of the students chose the most efficient and immediate way to complete their assignments. For the fifth theme, students sought help almost immediately. They spent an hour or less on their assignments before seeking help. The five themes above reveal that these students took the online class as they thought it would cost them the least amount of time.

**Theme one: The majority of the students sought executive help.**

This theme emerged from data collected from the weekly journals. The students were asked if they had sought help for the assignment and if they had, did they ask for the answer or did they just ask for a hint so that they could complete it on their own. If the students asked for the
answer, then they were in essence asking for executive help. If the students asked for a hint, they were asking for instrumental help.

In assignment one, nine students sought executive help and one student sought instrumental help. In assignment two, four students sought executive help and one student sought instrumental help. In assignment three, four students sought executive help and one student sought instrumental help. In assignment four, ten students sought executive help and nobody sought instrumental help. In assignment five, one student sought executive help and one student sought instrumental help. In assignment six, three students sought executive help and nobody sought instrumental help. In assignment seven, seven students sought executive help and nobody sought instrumental help. In assignment eight, four students sought executive help and two students sought instrumental help. In assignment nine, nobody sought help. In assignment ten, 21 students sought executive help and two students sought instrumental help. In assignment 11, ten students sought executive help and three students sought instrumental help. In assignment twelve, two students sought executive help and nobody sought instrumental help. This implies that the majority of
the students sought executive help and not instrumental help.

Karabenick and Knapp (1991) conceive help seeking in an academic setting as instrumental help seeking rather than executive help seeking. In such an environment one would expect students to seek instrumental help as "[t]he focus of instrumental help-seeking is in learning the process rather than just acquiring the solution, that is, the product" (Karabenick & Knapp, 1991, p. 221). In this case study, it was found that the majority of the students sought executive help rather than instrumental help. This finding is counterintuitive to the higher learning environment as one would expect students to be more interested in the learning of new material instead of just finding answers in order to hand in assignments on time.

Themes two and three are closely related to the role adjustments made by the students in an online environment. As such, they will be discussed together.

Theme two: The majority of the students were frustrated with their inability to complete the assignment without help.

The second theme is the frustration experienced by the students in completing the assignments. Since this is a
class in computer technology, learning a new piece of software on one's own can be frustrating. Data from the weekly journals revealed that on seven of the twelve assignments, more than 50% of the students were frustrated in trying to complete the assignment. This was true of assignments one (57.14%), two (52.17%), three (59.26%), four (84.62%), seven (53.85%), ten (89.29%), and eleven (58.33%). The frustration in trying to complete the assignments on time led the students to seek answers instead of hints.

Theme three: The majority of the students assumed that an online class is easier and less time-consuming.

This finding emerged from the interviews. It was discovered that most of the students thought that this class would be either easier as it was an online class, less time consuming, or that it would both be easier and less time consuming. When asked what their expectations were of taking an online class, six students said that it would be easier. Nine students said it would give them more time. Four students said that it would be both easier and would give them more time.

This finding was interesting as the syllabus for this course which consisted of teaching students how to use
computers and computer applications in order to enhance classroom teaching, clearly states that the course is very demanding and time-consuming. The following warning is provided in bold on the first page of the course syllabus:

Students usually believe that an online course will be easier and less time consuming than taking the course in a traditional classroom setting. Nothing could be farther from the truth! Online courses are seldom easier or take less time than taking the course face to face. Depending on your technology skill level, it may take more or less time to complete the course.

The finding of themes two and three is consistent with findings from a study conducted by Garrison et al. (2004). Garrison et al. investigated the role adjustment of students to online learning. The researchers constructed an instrument based on the community of inquiry conceptual model for online learning to measure the extent of the students' identification with the role of the online learner.

Two forms of the questionnaire containing 28 Likert-type questions examining role identity were constructed....The first form of the questionnaire
measured the students' anticipated personal adjustment to online learning compared to their previous face-to-face learning experiences. The second form measured the students' anticipated personal adjustment to online learning compared to their perceived experienced online learners. Five response choices were provided ranging from much better to much worse. (Garrison et al., 2004, p. 65)

The study was conducted in two graduate programs at Athabasca University in Athabasca, Alberta, Canada during the winter term of 2003. "The goal was to examine the expectations of learners prior to experiencing online learning. While experience was limited, it was expected that learners had a 'straw-model', or rough idea, of online learning activities as a point of reference" (Garrison et al., 2004, p. 65). A combination of print, electronic material, and online conferencing was used to deliver the content. Students did not know each other in most cases.

The researchers investigated three factors inherent in the online community of inquiry, namely, cognitive presence, social presence, and teaching presence. The results of the study indicated that students do see a difference and a need for adjustment.
Moreover, it would suggest that a face-to-face learning experience is viewed as more externally oriented (i.e., social and teaching presence), while online learning is viewed as more cognitive or internally oriented. Thus, online learning would be perceived as requiring greater individual responsibility. (Garrison et al., 2004, p. 70)

Role adjustment and increased individual responsibility in the learning process was not a factor that students considered in this case study. The findings of this case study clearly showed that students did not understand the role adjustments that they would have to make in an online environment. This led to their frustration in their inability to solve the problems and in their assumption that the online course would be easier and less time-consuming than a face-to-face class.

Theme four: The majority of the students sought informal help from their friends but formal help from their instructor.

This finding emerged from the data collected from the weekly journals. For most of the assignments that were easier and did not require specialized training to solve, students preferred to ask their friends for help. This is
true of assignments one, two, three, six, seven, and nine where students did not ask for help from their instructor at all. For assignment four, which caused the majority of the students to be frustrated, the split between help sought from friends and from the instructor was even. Twenty-three point zero eight percent asked their friends and 23.08% asked the instructors. Some students asked both the instructor and their friends for help. This may be due to the fact that KidPix does not require specialized help as it is not too difficult to figure out if you are diligent and are willing to spend some time familiarizing themselves with the software. For assignments 10 and 11, students believed that the instructor of the class would be the best person to ask for help as the help needed was more specialized in nature. For a majority of the students who worked on this assignment, time also played a major role in help seeking. As students ran out of time, they wanted answers from credible or formal sources of help.

In a study conducted by Karabenick and Knapp (1991), a difference between informal help seeking (i.e., seeking help from informal sources such as friends, other students, etc.) and formal help seeking (i.e., seeking help from formal sources such as the instructor of the class, support
services provided by the school, asking questions in class, etc.) was found. Students sought more instrumental help from formal sources than informal sources. In this case study, a more refined difference between formal and informal help seeking was found. The first major difference in findings between the two studies is that the majority of the students in this case study sought executive help and not instrumental help. Having said that, it was also found that students in this case study had a tendency to seek more informal help than formal help in assignments that did not require specialized help. For assignments that did require specialized help in solving the problems, students sought formal help.

In a two-year qualitative study conducted by Sherri Melrose (2004) which explored the help seeking activities of health care graduate students in an online Masters program at Athabasca University in Athabasca, Alberta, Canada, it was found that the students sought help first from their classmates. Students initially communicated with their peers via e-mail, and public discussion forums. Connections were also made through ...

...commonalities such as working in the same area of health care, living near to one another or
experiencing similar life stage issues. From these initial social conversations, more in-depth communication emerged and “life-long friendships” developed. Participants in this study all described how they established at least one or two of these friendships in most of their classes. And, as the relationships between and among learners did develop into friendships, students felt comfortable in asking one another for help when they needed it (Melrose, 2004, ¶ 22).

The study conducted by Melrose (2004) revealed that even though initial help was sought from peers whom the students did not know, the relationships developed into true and lasting friendships. The study also revealed that students sought connections with the other students in the class via a public discussion forum.

In this case study, students initially sought help from friends. In conversations with the students during the interview, the researcher found that some of the students were wary of asking their classmates for help as some students feared that their classmates would provide them with incorrect answers or mislead them. As such, students were wary of using the Help Forum set up by the researcher
on Blackboard 5.0. The Help Forum was set up so that the students could help each other and form connections. Very few students ventured to seek help from the Help Forum. When asked if they used the Help Forum in their weekly journals, none of the students sought help from the Help Forum either by posting a question or by reading the questions or answers posted by other students for assignments one, seven, nine, eleven, and twelve.

Only one student sought help from the Help Forum for assignments two and three. For assignment two, the student asked a question on the Help Forum in order to find a few things. She found the Help Forum helpful. For assignment three, the student wanted to find out if anyone had posted any questions and to see if those questions would help her or if she could answer those questions in order to help someone else.

Two students sought help from the Help Forum for assignments six and eight. For assignment six one of the two students said that she went to the Help Forum because she was not sure of the topic. The other said:

I did but they were not any help at all either. They did not give me the info that I need in order to solve my problem.
For assignment eight, one student wanted to find out what software program she was supposed to create her chart in. The second student said:

Yes, I posted a question but no one got back to me so I did what I thought best.

Three students went to the Help Forum for assignments five and ten. For assignment five, the three students had the following to say:

- Yes I did, I looked on the help forum and someone had already asked my question and got a reply.
- I checked to see if there was a post about the bookmarks, but there weren't any so I didn't use it after that.
- Yes, I used it to get information regarding finding websites.

For assignment ten, the three students said:

- Yes, but I could not find the answer to my problem.
- I did read what others had wrote but I did not submit any questions myself. It was too hard to try and explain what I needed help with. I decided that I would ask for help in our meeting if I still could not figure out my troubles.
Yes because I didn’t know what else to try. I could not publish the web page.

Four students checked out the Help Forum for assignment four.

I tried to use it to figure out how to save the file, but I still couldn't figure out the answer, so I sought help after that.

Yes and no. I find it easier to email directly.

I went to the Help Forum one time to see if any one had asked questions and to see if those questions are things that might concern me or if they are questions that I may have the answer to in order to help someone else out.

Yes, I didn't understand how to use some of the tools and I found the forum to be helpful in answering the questions that I needed.

From the information above, it is obvious that unlike the study conducted by Melrose (2004), the Help Forum created by the researcher for this case study was a failure in that none of the students used it to make connections with the other students in the class in terms of finding a classmate to work with on assignments and projects. The
main source of help in this case study was not the other students in the class.

**Theme five: Students sought help almost immediately.**

This finding was discovered from data collected from the weekly journals. Students were asked if they had sought help in completing the assignment and if they had, how much time they had spent on the assignment before seeking help.

For assignments 1, 2, 3, 4, 5, 7, 8, and 12, the majority of students asked for help before starting the assignment or after working on it for an hour or less. For assignments 6, 10, and 11, the majority of the students asked for help after more than an hour. This shows that for 8 of the 12 assignments, the majority of the students sought help early. Only for assignments 6, 10, and 11 did the students seek help later (i.e., after working on it for more than an hour). Students did not seek help for assignment 9.

Karabenick and Knapp (1988) described a curvilinear relationship between the need for help and help seeking. The study reported that students with high and low need for help sought less help than those with moderate need. Those with low need did not seek help because they did not need it. Those who needed help the most, did not seek help
either. An interpretation for this puzzling finding may be that these students perceived themselves as not having the ability to solve the problem either by seeking help or not (Karabenick and Knapp, 1988). In this case study, this was not the case. The students who sought help early obviously perceived a need and were quick to act upon this need. The students who sought help after working on the assignment for more than an hour also perceived a need for help and sought the help they needed.

Students who sought help early can also be regarded as seeking executive help as the students are only dealing with surface level strategies. Arbreton (1998) believes that executive help seeking is a passive approach to problem solving and involves surface level cognitive processing strategies as it involves seeking help in order to complete the task quickly. The intention is to get someone else to solve the problem (Arbreton, 1998).

Research Question Two

Research question two asked the following:

What is the relationship of self-esteem to help seeking in an online learning environment.

Two components were identified. These included the level of self-esteem of the students, and the relationship of self-
esteem to help seeking in an online learning environment. The following three themes emerged from the two components:

1. The majority of the students were correct in their self-analysis of their level of self-esteem.

2. Two types of self-esteem were identified, namely, academic self-esteem and social self-esteem.

3. The majority of the students, regardless of their level of self-esteem, were open to seeking help.

**Theme six: The majority of the students were correct in their self-analysis of their level of self-esteem.**

This theme was discovered by comparing data from one of the standardized tests, Good-L and Good-K's (n.d.), *A Measure of Self-Esteem*, to the data from the interviews. The interview question asked the students if they would consider themselves as having high or low self-esteem.

Comparing the actual scores that the students received in *A Measure of Self-Esteem* to their answers in the interviews, it was discovered that out of the 24 students who answered the question, "Would you consider yourself as having high or low self-esteem?", in the interviews with either a high, medium, or low level of self-esteem, 16 students displayed consistency in their answers to both the...
standardized test and the interview question. Fourteen of
the 16 students had high scores on the standardized test
and alleged that their self-esteem was high when
interviewed. Two students had medium scores on the
standardized test and admitted that their level of self-
estee was not too high and not too low (i.e., somewhere in
the middle).

The majority of the students were correct in their
assumption of their level of self-esteem. The level of
self-esteem they admitted to in the interviews matched the
scores they received on the standardized test.

According to Campbell and Foddis (2003), the
procedures that are commonly used to measure self-esteem
are highly vulnerable to criticism. This is due to the fact
that most self-esteem research is based on answers to self-
report questionnaires.

This procedure of asking people to introspect or
engage in self-report is a legitimate one. But
introspective data are of no value if the person is
not answering truthfully, or if he is out of touch
with the feelings he is supposed to report, or if he
lacks an understanding of the matter at issue. All of
these problems are to be expected in measuring self-esteem (Campbell & Foddis, 2005, ¶ 15).

Answers to questionnaires on self-esteem are also influenced by social desirability. This is why American college students frequently have average scores of 70 out of a possible 90 on the Rosenberg Self-Esteem Scale.

To make matters worse, when the usual questionnaires are used to measure self-esteem, researchers cannot check the evaluations against reality. When self-report questionnaires can be crosschecked, they are often found to be seriously inadequate. For example, many American high school students who say they are good at mathematics perform poorly on math tests. On the Objectivist conception of self-esteem, this is a critical measurement flaw, for genuine self-esteem must be realistically based (Campbell & Foddis, 2005, ¶ 15).

This case study shows that self-reports on self-esteem were accurate as the majority of the students were correct in their self-reports of their level of self-esteem. Their self-reports were realistically based and were genuine.
Theme seven: Two types of self-esteem were identified, namely, academic self-esteem and social self-esteem.

Another important finding that emerged from research question two is that in answer to the question that asked them if they considered themselves as having high or low self-esteem, three students or 11.11% actually differentiated between academic self-esteem and social self-esteem. To them, there was more than one type of self-esteem.

As data analysis was an ongoing process and occurred during data collection, this unexpected and interesting finding that some students identified two different types of self-esteem led the researcher to devise a follow-up questionnaire that asked the students to rate their level of self esteem on a scale of 1 to 10, 1 being low and 10 being high. They were also asked if they believed that there were different types of self-esteem, namely academic and social self-esteem. If the students believed that there were different types of self-esteem, they were asked to rate their academic self-esteem and their social self-esteem on a scale of 1 to 10, 1 being low and 10 being high. Only 24 students returned the questionnaire to the researcher.
Twenty-three or 95.83% of the students believed that there were different types of self-esteem, namely, academic self-esteem and social self-esteem. When asked to rate themselves on their academic self-esteem and their social self-esteem on a scale of 1 to 10, 1 being low and 10 being high, 11 students or 47.83% rated themselves as having higher social self-esteem than academic self-esteem. Five students or 21.74% rated themselves as having higher academic self-esteem than social self-esteem. Seven students or 30.43% rated themselves as having equal academic and social self-esteem.

Huit (2004) believes that “[s]elf-esteem is the affective or emotional aspect of self and generally refers to how we feel about or how we value ourselves (one’s self-worth). Self-concept can also refer to the general idea we have of ourselves and self-esteem can refer to particular measures about components of self-concept (¶ 3). Huit believes that self-esteem is a component of self-concept. Yeung (2003), however, believes that self-concept is a component of self-esteem.

In the broad definition of self-concept offered by Shavelson, Hubner, and Stanton (1976) ... self-esteem is defined as a general, global self-concept under
which multiple dimensions of self-concepts are subsumed (e.g., social, physical, academic self-concepts).... One of the greatest advances in the knowledge of self-concept is its multidimensionality such that an individual may have a positive academic self-concept but average physical and social self-concepts (Yeung, 2004, ¶ 2).

How self-esteem and self-concept are related varies according to the researcher. Whichever way you view the relationship, it is clear that self-esteem and/or self-concept are multidimensional. The finding from this case study supports the notion of the multidimensionality of self-esteem.

Theme eight: The majority of the students, regardless of their level of self-esteem, were open to seeking help.

It was found that nineteen students or 70.04% of the 27 students who agreed to be interviewed admitted to having high self-esteem when asked the following question:

Would you consider yourself as having high or low self-esteem?

All nineteen students were open to seeking help. Five students or 18.52% said they had medium self-esteem. All
five were open to seeking help. Three students or 11.11% actually differentiated between academic self-esteem and social self-esteem. One student admitted to having higher academic self-esteem than social self-esteem. The second student said she had higher social self-esteem than academic self-esteem. The third student said that both her academic and social self-esteem were high. All three admitted to being open to help seeking if they needed it. The above information implies that the students were willing to seek help when they needed it regardless of their level of self-esteem.

In the extensive literature review conducted by the researcher, it was discovered that two opposing principles predict different relationships between self-esteem and help seeking. The principles are vulnerability and consistency. The principle of vulnerability predicts that people with low self-esteem are more threatened by help seeking and so will avoid seeking help. The principle of consistency predicts that people with high self-esteem are more threatened by help seeking and so will avoid seeking help. This principle is based on the fact that help seeking implies inadequacy (Karabenick & Knapp, 1991).
In contrast to the finding of this case study, the literature review revealed that researchers (Fisher et al., 1982; Nadler & Fisher, 1986) generally support the principle of consistency rather than vulnerability. These researchers believed that those with high self-esteem would seek less help.

A study conducted by Karabenick and Knapp (1991) found a direct relationship between self-esteem and instrumental help seeking. Students with high self-esteem were more likely to seek help when it was needed whereas students with low self-esteem were more threatened by having to seek help and so they avoided it. The relationship between self-esteem and instrumental help seeking was one of vulnerability rather than consistency (Karabenick & Knapp, 1991).

The findings of this case study differed from the above study in three aspects. The first aspect is that the relationship under study was between self-esteem and executive help seeking. The second aspect is that the students sought the help they needed regardless of their level of self-esteem. The third aspect is that some of the students did not perceive self-esteem as being just high or low. They viewed it as a continuum. Five students or 18.52%
believed that their self-esteem was neither high nor low. It was somewhere in between.

Research Question Three

Research question three asked the following:

What is the relationship of self-regulated learning to an online learning environment?

Two components were identified. These included the learning strategies used by the students and the relationship of learning strategies to online learning. The following two themes emerged from the two components:

1. Only half the students used higher level learning strategies

2. The majority of the students used the same learning strategies in the online learning environment as in a face-to-face environment.

Theme nine: Only half the students used higher level learning strategies.

Data was collected from the interviews conducted towards the end of the quarter. In the interviews, the students were asked what learning strategies they used in a face-to-face classroom and if taking an online class had changed the learning strategies they used.
Students' answers in the interviews were analyzed according to the five subsections of the Cognitive and Metacognitive Strategies of the Learning Strategies Scales. The five subsections are Rehearsal, Elaboration, Organization, Critical Thinking, and Metacognitive Self-Regulation. The students' answers in the interviews ranged from repetition, reading the book before class, taking notes, reading over the notes, summarizing, making a list, making a study sheet or a study guide, highlighting important points, underlining important points, outlining, relating to other things, use of background knowledge, planning, monitoring and regulation. These answers were grouped into the five categories based on the definition of each category provided by Pintrich et al. (1991). The researcher then divided these five learning strategies into two further categories. Rehearsal, Elaboration, and Organization were grouped as basic learning strategies. Critical Thinking and Metacognitive Self-Regulation Strategies were grouped as higher level learning strategies.

Analysis of the answers revealed that 13 students (N=26) or 50% used basic learning strategies of Rehearsal, Elaboration, and Organization. Thirteen students or 50%
used both basic learning strategies and higher level learning strategies of Critical Thinking and Metacognitive Self-Regulation.

A qualitative study conducted by Styles and Zariski (2003) on learning strategies used by students in an online environment revealed that students used strategies for coping with technical demands of online learning more than other learning strategies. The use of higher level cognitive strategies was limited.

In this case study, the number of students who used only basic learning strategies was equal to the number of students who used higher level learning strategies. This may be due to several factors. Styles & Zariski (2003) coded their data using a modified version of the standard taxonomy of strategies. This researcher used the MSLQ as a basis for the categorization of data. Another factor is that Styles and Zariski (2003) split each category into two levels (i.e., basic and complex). This researcher divided the five categories into two. Rehearsal, Elaboration and Organization were considered basic and Critical Thinking and Metacognitive Self-Regulation Strategies were considered higher level strategies. Styles and Zariski (2003) also believe that the reason students do not know
what learning strategies to use or how to use them may be
due to the technical procedures involved in learning. As
they are concentrating on trying to figure out the
technical problems, they do not use higher level cognitive
strategies (Styles & Zariski, 2003). In this case study,
data collected from the demographic questionnaire given to
the students on the first day asking students to indicate
their level of computer literacy revealed that the majority
of the students were computer literate. All 28 students or
100% agreed that they knew how to type their assignments on
the computer, how to use the spell checker, how to save
their assignments, how to print their assignments, and how
to access the Internet. Twenty six students or 92.86% said
they knew how to copy files. Twenty-seven students or
96.43% said they knew how to delete files. Even though the
students were not using coping strategies to deal with
technical problems in this case study, only 50% of the
students used higher level cognitive strategies.

According to Arbreton (1998), executive help seeking
is a passive approach to problem solving and involves
surface level cognitive processing strategies. The
intention is to get someone else to solve the problem in
order to complete the task quickly. Executive help seeking
is dependency oriented (Nelson-Le Gall & Glor-Scheib, 1985). In contrast, instrumental help seeking is a deep level cognitive processing strategy and involves merely asking for hints in order to solve the problems (Arbreton, 1998). Instrumental help seeking is mastery oriented (Nelson-Le Gall & Glor-Scheib, 1985). In this case study, the students' use of surface or basic learning strategies revealed that they were more concerned with solving the problem quickly. That is why a majority of them sought executive help and not instrumental help.

**Theme ten: The majority of the students used the same learning strategies in the online learning environment as in a face-to-face environment.**

The students' use of learning strategies in the online learning environment was investigated through the interviews. The students were asked if taking an online class had changed the learning strategies they normally used in a face-to-face class.

Sixteen students (N=27) or 59.26% who were interviewed said that taking an online class had not changed the learning strategies that they normally used in a face-to-face class. This finding implies that the majority of the students used the same learning strategies that they
normally used in a face-to-face class as they were unaware of the role adjustments that they would have to make in an online environment. Their perception dictated their study approach.

This finding from this case study is consistent with Richardson's (2003) findings. Richardson conducted a quantitative study on 400 randomly selected Open University students taking an online basic computing class in the United Kingdom. The purpose of the study was "to investigate concomitant variations in the students' perceptions of the quality of their courses and in the approaches to studying that they adopted on those courses" (Richardson, 2003, p. 435). The content included basic word processing, the effective use of e-mail, computer conferences, and the development of a Web page. Students were informed that they were assumed to be new to computing. Richardson used a modified version of the Course Experience Questionnaire (CEQ) and a modified version of the Revised Approaches to Studying Inventory (RASI).

Richardson (2003) adapted the CEQ and the RASI for use with Open University students. The CEQ "measures students' perceptions of the academic quality of their courses" (Richardson, 1990, p. 434). The RASI is a measurement of
the students' learning approaches. Many different versions of the RASI evolved through the years. Some of the learning approaches measured in the different versions include the deep approach, the surface approach, the strategic approach, the apathetic approach, academic aptitude, lack of direction, academic self-confidence, and metacognitive awareness of studying (Duff, 2000).

Richardson (2003) discovered the "existence of an intimate relationship between students' approaches to studying and their perceptions of their academic environment. This is consistent with the idea that the choice of one approach to studying rather than another depends on students' perceptions of the content, the context and the demands of their courses" (Richardson, 2003, p. 440). This was consistent with the findings of this case study as students did not perceive the online environment as different from a face-to-face class and as a consequence would not require any adjustments on their part in terms of study approaches.

Garrison et al. (2004) believe that the responsibilities and requirements of working online are not readily evident to the students who are new to online learning. In this case study, during the interviews, when
asked if they had taken an online course before, 16 students (N=26) or 61.54% admitted that they had not taken an online course before. Asked why they had taken this online course, ten students said they did not know that it was an online class. Five of these students had taken an online course before and five had not. One of the five students who had never taken an online course before so aptly said:

Actually I didn’t know I was taking it first. When I went to register my classes, ah, I'm like a senior and the first one to register, all it said in the book — it was on Tuesdays from 1-3 , alright, then I had another education class that was only on Thursdays from 1-4, so I’m like that worked out perfect, you know — I didn't read to see that it was online and I just looked at the times. So then, like the day before classes started it came up that it was on Tuesdays and Thursdays 1-3 and I like freaked out and said, "Oh my gosh, I have two classes on Thursdays 1-3!" And it's like I have everything set up so I would be done in the winter, so I freaked out and I talked to [the professor], and he's like "No we only have classes on Tuesdays." So I'm like "OK." So I'm sitting in class
and he says it’s an online class and I'm like "Oh, right on — ok — it’s an online class now." It’s kind of weird. I didn't really plan it or anything. It sort of happened. There was another course offered from 8-10 in the morning, but last quarter, I don't even remember what the professor's name was, but a bunch of people who are in my classes were talking about having him and not to take it with him. I was like "Either I can take this class at eight in the morning with a professor who everybody has told me not to take, or I could take this online class. So, I stuck with the online class.

Yet other students decided to take the online course for a variety of other reasons. Two students said it was the only open course available. Four students took the online course because they believed that it would not take up as much time. One of these four students had taken an online course before and, yet, still assumed that an online course would be less time-consuming than a regular face-to-face class. One of the students actually wanted to take more classes and assumed that an online class would cater to that need by providing the student with extra time.
Before I’m taking up to the total 19 credit hours — I was actually going to take more, so I needed the extra time during the day to take more classes.

Two students believed that taking an online class would allow them to work at their own pace. One student said it would be more flexible. One student said she took the online course because she was familiar with the programs.

Because I felt very familiar with the programs that I was going to have to use and I felt that I would have been bored if I took it in the classroom.

One student said she took this online course because she wanted to take it with the professor and this was the only course he was teaching that was open.

Um — last quarter I had Professor ... for this class but I had to withdraw from classes for surgery. So this was the only one he was teaching so I wanted to stay with him cause he said it really wouldn’t change that much so I wouldn't have to redo everything that I had already done.

One student said she wanted to take this class because she wanted to try something different.
Um, it was just something different and I just figured I might as well try it out and see if I liked it or not.

These students obviously were not aware of the role adjustment that they would have to make and so were not prepared for it.

Implications and Recommendations for Future Research

Nelson-Le Gall's (1981) seminal work on help seeking in children brought to the fore the importance of help seeking in the educational context. Since then, a plethora of research has investigated the help seeking behavior of elementary, middle, and high school students. Although some research has been conducted on the help seeking behavior of college and university students, a gap still exists in our understanding of the help seeking behavior of undergraduate and graduate students taking an online course. This case study attempts to fill the gap and advances our understanding of the help seeking behavior of undergraduate students taking an online course at a Midwestern university. The following implications were unearthed in this case study.

The findings of this study revealed that undergraduate students were more interested in completing assignments and
getting good grades than in the actual learning process. This is a surprising finding as one would expect undergraduate and graduate students to be more interested in the learning process in an institution of higher learning. This could be due to the isolation factor. Students taking an online class may feel totally isolated and alone in trying to complete and hand in assignments on time. Without a lecture and in-class discussions, students may not be able to recognize the value of the content of the course. It is imperative, then, that future researchers include collaborative activities in online learning. Just setting up a discussion board for students to communicate with each other and to seek help is not enough as evidenced in this research study.

From the two focus groups, it was found that the majority of the students did not like the book as most of the assignments had nothing to do with information from the book and the book was only needed for the quizzes. They believed that the quizzes should have contained information from their assignments instead of the book. Most of them did not read the book and thought it was a waste of money to have bought the book. Online instructors have to make sure that the books and materials for the course are
appropriate as they are the main source of help for the students.

Students were also very frustrated in trying to complete their assignments on their own without seeking help from other people. Time-management was another issue of concern. Although warnings were provided in their syllabus about the fact that an online class is neither easier nor less time-consuming than a face-to-face class, students either paid no heed to it or did not read the syllabus. They still assumed that learning online would be easier and less time-consuming as evidenced by their answers in the interviews which were conducted at the end of the quarter. Learning in an online environment can be vastly frustrating for even computer savvy students. The way content is presented is very important in such an environment. In this case study, the online course was not altered much from the regular face-to-face class. The syllabus was not changed to accommodate the needs of the online students. Only minor technical adjustments were made. Assignments were not paced according to the difficulty level or amount of time needed to complete them. Future research then needs to examine the way the online course should be structured for effective teaching and
learning to occur and how it can be done without putting too much pressure on the online instructor in terms of time and effort.

During the focus group interviews it was found that students had difficulty getting access to the labs. There are two computer labs in the College of Education. The first lab is Lab A and it has 20 computers and two black and white printers, one color printer, and a scanner. Both PCs and Macs are available in Lab A. The second lab is Lab B and it has 30 computers and two black and white printers, one color printer, and a scanner. Lab B is entirely equipped with PCs. The schedule for the two labs are posted outside the labs. Students can check this schedule for times when the labs are open. Sometimes when no classes are scheduled for the lab, a class may come in and take over the lab. Some of the software needed to complete the assignments are not found on any other computers in any other lab on campus. When students do not have access to the labs, they cannot complete their assignments on time. For effective online learning to take place, needs such as this have to be addressed before the start of the course.

In terms of self-esteem, the majority of the students in this case study viewed self-esteem as consisting of
different types. They identified academic and social self-esteem and viewed them as being different from their overall self-esteem. Future researchers need to take this into account when selecting standardized tests for measuring self-esteem.

The students also viewed self-esteem as being a continuum. The researcher had to analyze the results of the standardized test in terms of this continuum as answers given by the students revealed that they considered their level of self-esteem to be either high, low, or somewhere in between. Designers of standardized tests on self-esteem and future researchers need to take this into account.

This case study also revealed that the students' self-reports on self-esteem were accurate when crosschecked with their answers on the standardized test. This negates Campbell and Foddis' (2005) belief that self-report questionnaires on self-esteem are inaccurate as they do not reveal the real level of self-esteem of the students. This means that the online environment may provide a cloak of anonymity that may be required for the students to answer the questions truthfully.

Only half the students in this case study used higher level learning strategies. They apparently only wanted to
hand in their assignment on time and were not too concerned with deep learning strategies.

When students adopt the surface approach, they aim to:

• meet the requirements minimally;

• set a balance between failure and working more than necessary;

• satisfy the external (assessment) requirements (Institute for Interactive Media Learning, 2005, ¶ 5).

In their learning strategies, they tend to:

• limit their target to the bare essentials;

• reproduce essentials for assessment purposes through memorizing or rote learning;

• be passive in their learning;

• have negative emotions about learning;

• prefer to learn in isolation (Institute for Interactive Media Learning, 2005, ¶ 5).

When students adopt the deep approach, they aim to:

• satisfy their interest in what is being learned;

• develop higher levels of competence in particular topics and subjects;
become actively involved in learning by asking questions and wishing to apply new knowledge that they have gained;

overcome fear and other negative feelings and associate higher levels of values with learning;

prefer to learn in a social context such as with other students or seeking opportunities to engage the lecturer in discourse (Institute for Interactive Media Learning, 2005, ¶ 6).

In their learning strategies, they tend to:

discuss meaning by personal exploration, reading widely, practicing, and memorizing;

interconnect new learning with previous and related knowledge;

wish to examining various points of view and become involved in creating knowledge and understanding through discussion (Institute for Interactive Media Learning, 2005, ¶ 6).

As it is important to promote deep learning strategies, the online instructor has to design activities that will lead to deep learning. Handing in assignments on time and grades
should not be the focus of the class as it was in this case study.

Also the majority of the students used the same learning strategies that they used in an online environment. As Garrison et al. (2004) believe that the responsibilities and requirements of working online are not readily evident to the students who are new to online learning, it is imperative that the online instructor inform students of the differences that an online class will entail.

As a result of this research case study, the researcher proposes the following recommendations:

1. The Help Forum created by the researcher did not produce the desired results. It was expected that the students would use the Help Forum to help each other and to form collaborative relationships. From the interviews, it was discovered that this was not the case as the students did not trust each other. They were afraid that their classmates would provide them with incorrect answers. It is recommended that the online instructor find a way to build trust among the students through collaborative activities.
2. The online students did not like the book as most of the assignments had nothing to do with information from the book and the book was only needed for the quizzes. Most of them did not read the book and thought it was a waste of money to have bought the book. This was due to the fact that the online course was product oriented. As such, the students thought the book was not important as it dealt with the integration of technology (process) instead of the completion of the assignments (product). It is recommended that online course be structured in such a way as to focus on process rather than product.

3. The online students in this case study also had difficulty completing the assignments on time. This was due to the fact that the assignments were not paced according to their level of difficulty. It is recommended that online instructors structure the course in such a way as to take into account the time needed to complete each assignment.

4. From the two focus groups it was discovered that students had difficulty getting access to the computer labs. It is recommended that the needs of
the online students be addressed before the start of any online program.

5. As the researcher discovered that self-esteem was not a factor in the help seeking behaviors of online students, as students with all levels of self-esteem were open to seeking help, it is recommended that further research be conducted to investigate this interesting phenomena.

6. The researcher’s discovery of there being more than one type of self-esteem should also be the basis of further qualitative and quantitative research study. It is recommended that future researchers take this into account when selecting standardized tests on self-esteem.

7. Through the weekly journals, it was discovered that only half the students used higher level learning strategies. The students were more interested in completing assignments on time for grades rather than in the actual learning process. It is recommended that the online instructor structure the activities in such a way as to promote deep learning. This means that activities should be paced in such a way as to provide enough time for students
to complete the assignments. Also grades should not be the focus of the completion of the assignments. Instead, each activity or assignment should build on the knowledge obtained from the previous one.

8. The online students were also not aware of the role adjustments that they would have to make as online learners. It is recommended that the online instructor inform the students of the role adjustments that the students would have to make at the beginning of the course.

Closing Remarks

In today's world where there is an increasing need for continuing education for working adults, the future of education may very well lie in online courses (Dolence & Norris, 1995). As the need for continuing education in the work force increases, the demands for effective online courses will increase exponentially. Pioneering research like the case study presented here to improve the quality of such online services must be embraced to meet this new generation's learning expectations. It is hoped that the ten themes that emerged in this case study provided some insight into the help seeking behaviors of undergraduate students taking an online course. Ideally, this
enlightening research will lead to improved educational experiences for both the online learners and the online instructors.
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Appendix A

Consent Form

Title of Research: Help Seeking in an Online Environment

Principal Investigator: Fatimah Taherbhai

Department: Educational Studies

Federal and university regulations require signed consent for participation in research involving human subjects. After reading the statements below, please indicate your consent by signing this form.

Explanation of Study
The purpose of this research is to investigate the help seeking behaviors of college students taking a technology applications in education course online at Ohio University. Help seeking in an online environment is different from help seeking in a traditional classroom as there is little or no face-to-face contact with the instructor and tutors and there is minimum contact with other online students. It is hoped that the results of this study will allow instructors to create online courses that take into account the help seeking behaviors of these college students so that the online learning experience will be a productive one for both the instructor and the students.

The participants will be given a demographic questionnaire to complete at the beginning of the quarter. This should take about 10 minutes. The participants will also be given two standardized tests. This should take 20 minutes. The participants will be required to keep weekly journals which will be sent to the researcher via e-mail every Monday. The researcher will provide a template in the form of a Microsoft Word document. This should take about 10 minutes to complete. The participants will also be interviewed for about 45 minutes to 1 hour. A focus group will also be conducted with about 6 to 10 students.

Risks and Discomforts
There is only minimal risk involved in the study in that the participants might ask for help from colleagues and this may cause embarrassment.
Benefits
It is hoped that the results of this study will allow instructors to create online courses that take into account the help seeking behaviors of college students so that the online learning experience will be a productive one for both the instructor and the students. The participants will gain in understanding of their help seeking behavior and their levels of self-esteem and motivation.

Confidentiality and Records
Only the Principal Investigator will have access to raw data. Interviews will be audio taped. The raw data and the audio tapes will be destroyed a year after the successful completion of the dissertation.

Compensation
There will be no compensation from either Ohio University or the Principal Investigator.

Contact Information
If you have any questions regarding this study, please contact:

Advisor: Dr. Teresa Franklin
E-mail: franklit@ohio.edu
Phone number: 740-593-4561

Researcher: Fatimah Taherbhai
E-mail: ft220100@ohio.edu
Phone number: 740-589-4526

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.
I certify that I have read and understand this consent form and agree to participate as a subject in the research described. I agree that known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. I certify that I am 18 years of age or older. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I certify that I have been given a copy of this consent form to take with me.

Signature_____________________________ Date ______________

Printed Name________________________
Appendix B

Institutional Review Board

A determination has been made that the following research study is exempt from IRB review because it involves:

Category 2  research involving the use of educational tests, survey procedures, interview procedures or observation of public behavior

Project Title: Help Seeking in an Online Environment

Project Director: Fatimah Taherbhai

Department: Educational Studies

Advisor: Teresa Franklin

Rebecca Cale, Associate Director, Research Compliance
Institutional Review Board

1-21-04  Date
Appendix C
Demographic Questionnaire

1. Are you
   □ Male □ Female

2. Are you a
   □ Sophomore
   □ Junior
   □ Senior
   □ Graduate student
   □ Other (Please specify)

3. How many hours are you taking this quarter?
   ______________________________________________________

4. Why did you decide to take an online course?
   ______________________________________________________

5. Do you have a computer or access to one at home/dorm?
   □ Yes □ No
   If no, where do you go? __________________________________

6. How much time do you spend on the computer daily?
   □ 0 – 1 hour
   □ 1 – 2 hours
   □ 2 – 3 hours
   □ 3 – 4 hours
7. What do you do when you use the computer? (Check all that apply)

☐ Check e-mail

☐ Chat with friends

☐ Surf the Internet

☐ Work on class assignment

☐ Download music

☐ Download games

☐ Other (Please specify) ____________________________________

8. Indicate your level of computer literacy by selecting one or more of the following. (Check all that apply)

☐ I know how to type my assignments on the computer

☐ I know how to use the spell checker

☐ I know how to save my assignments

☐ I know how to print my assignments

☐ I know how to copy files
9. I have used the following software programs. (Check all that apply)

☐ Microsoft Word
☐ Microsoft Excel
☐ Microsoft PowerPoint
☐ Microsoft Publisher
☐ KidPix
☐ Built Personal WebPage
☐ Others. (Please specify) ________________________________

10. Have you ever used Blackboard before in other classes?

☐ Yes    ☐ No

11. Do you communicate online with the other students in the class?

☐ Yes    ☐ No

If yes, what do you talk about? (Check all that apply)

☐ Assignments
☐ Grades
☐ Reading resources
☐ Other (Please specify) ________________________________
Appendix D

A Measure of Self-Esteem

A MEASURE OF AWARENESS

Read each item carefully. Circle True or False as each item applies to you. There are no correct answers.

T  F  1. I feel that I am too shy.
T  F  2. I have a high degree of self-confidence.
T  F  3. I have often wished that I were more creative.
T  F  4. I wish that I could be more persistent at things that I start.
T  F  5. I have little or no difficulty with school work.
T  F  6. I seem to have more personal problems than most other people have.
T  F  7. I sometimes feel rather worthless.
T  F  8. I do not seem to make friends as easily as others do.
T  F  9. I feel that I have a good speaking voice.
T  F  10. I seem to do well at most everything I try.
T  F  11. I have often wished that I could get along with other people better.
T  F  12. I do not feel that I weigh more than I should.
T  F  13. I usually feel somewhat clumsy or awkward at parties or social gatherings.
T  F  14. I have often wished that I had more athletic ability.
T  F  15. I sometimes feel that I would rather be someone else.
T  F  16. I have often wished that I had more musical or artistic talent.
T  F  17. I overcome personal setbacks rather easily.
T  F  18. I feel that others find me to be an interesting person.
T  F  19. I have often wished that I were better looking.
T  F  20. I do not have much will power.
T  F  21. I feel that others enjoy my company at parties and social gatherings.
T  F  22. I sometimes feel that I don't know what I'm doing.
T  F  23. I feel that I have enough intelligence to accomplish almost anything I should desire.
T  F  24. I have often wished that I could keep myself better organized.
T  F  25. I feel that I become nervous or upset too readily.
T  F  26. I have difficulty standing up for myself.
T  F  27. I have often wished that I had better work habits.
Appendix E

Motivated Strategies for Learning Questionnaire

Motivated Strategies for Learning Questionnaire Manual

Part A. Motivation

The following questions ask about your motivation for and attitudes about this class. Remember there are no right or wrong answers, just answer as accurately as possible. Use the scale below to answer the questions. If you think the statement is very true of you, circle 7; if a statement is not at all true of you, circle 1. If the statement is more or less true of you, find the number between 1 and 7 that best describes you.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>not at all true of me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>very true of me</td>
</tr>
</tbody>
</table>

1. In a class like this, I prefer course material that really challenges me so I can learn new things. 1 2 3 4 5 6 7

2. If I study in appropriate ways, then I will be able to learn the material in this course. 1 2 3 4 5 6 7

3. When I take a test I think about how poorly I am doing compared with other students. 1 2 3 4 5 6 7

4. I think I will be able to use what I learn in this course in other courses. 1 2 3 4 5 6 7

5. I believe I will receive an excellent grade in this class. 1 2 3 4 5 6 7

6. I'm certain I can understand the most difficult material presented in the readings for this course. 1 2 3 4 5 6 7

7. Getting a good grade in this class is the most satisfying thing for me right now. 1 2 3 4 5 6 7

8. When I take a test I think about items on other parts of the test I can't answer. 1 2 3 4 5 6 7
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Scale</th>
<th>1</th>
<th>2</th>
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<th>5</th>
<th>6</th>
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</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>It is my own fault if I don't learn the material in this course.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>It is important for me to learn the course material in this class.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>The most important thing for me right now is improving my overall grade point average, so my main concern in this class is getting a good grade.</td>
<td></td>
<td>1</td>
<td>2</td>
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<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>I'm confident I can learn the basic concepts taught in this course.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13</td>
<td>If I can, I want to get better grades in this class than most of the other students.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14</td>
<td>When I take tests I think of the consequences of failing.</td>
<td></td>
<td>1</td>
<td>2</td>
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<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15</td>
<td>I'm confident I can understand the most complex material presented by the instructor in this course.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16</td>
<td>In a class like this, I prefer course material that arouses my curiosity, even if it is difficult to learn.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>17</td>
<td>I am very interested in the content area of this course.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>18</td>
<td>If I try hard enough, then I will understand the course material.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>19</td>
<td>I have an uneasy, upset feeling when I take an exam.</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
### Motivated Strategies for Learning Questionnaire Manual

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>not at all true of me</th>
<th></th>
<th>very true of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td>I'm confident I can do an excellent job on the assignments and tests in this course.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I expect to do well in this class.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>I think the course material in this class is useful for me to learn.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>When I have the opportunity in this class, I choose course assignments that I can learn from even if they don't guarantee a good grade.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>If I don't understand the course material, it is because I didn't try hard enough.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>I like the subject matter of this course.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>Understanding the subject matter of this course is very important to me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I feel my heart beating fast when I take an exam.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>I'm certain I can master the skills being taught in this class.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>I want to do well in this class because it is important to show my ability to my family, friends, employer, or others.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Considering the difficulty of this course, the teacher, and my skills, I think I will do well in this class.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Part B. Learning Strategies

The following questions ask about your learning strategies and study skills for this class. **Again, there are no right or wrong answers. Answer the questions about how you study in this class as accurately as possible. Use the same scale to answer the remaining questions. If you think the statement is very true of you, circle 7; if a statement is not at all true of you, circle 1. If the statement is more or less true of you, find the number between 1 and 7 that best describes you.**

<table>
<thead>
<tr>
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<th>5</th>
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</tr>
</thead>
<tbody>
<tr>
<td>32.</td>
<td>When I study the readings for this course, I outline the material to help me organize my thoughts.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>33.</td>
<td>During class time I often miss important points because I'm thinking of other things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>34.</td>
<td>When studying for this course, I often try to explain the material to a classmate or friend.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>35.</td>
<td>I usually study in a place where I can concentrate on my course work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>36.</td>
<td>When reading for this course, I make up questions to help focus my reading.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>37.</td>
<td>I often feel so lazy or bored when I study for this class that I quit before I finish what I planned to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>38.</td>
<td>I often find myself questioning things I hear or read in this course to decide if I find them convincing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>39.</td>
<td>When I study for this class, I practice saying the material to myself over and over.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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</tbody>
</table>
Motivated Strategies for Learning Questionnaire Manual

40. Even if I have trouble learning the material in this class, I try to do the work on my own, without help from anyone.

41. When I become confused about something I'm reading for this class, I go back and try to figure it out.

42. When I study for this course, I go through the readings and my class notes and try to find the most important ideas.

43. I make good use of my study time for this course.

44. If course readings are difficult to understand, I change the way I read the material.

45. I try to work with other students from this class to complete the course assignments.

46. When studying for this course, I read my class notes and the course readings over and over again.

47. When a theory, interpretation, or conclusion is presented in class or in the readings, I try to decide if there is good supporting evidence.

48. I work hard to do well in this class even if I don't like what we are doing.

49. I make simple charts, diagrams, or tables to help me organize course material.
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>not at all true of me</th>
<th>very true of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.</td>
<td>When studying for this course, I often set aside time to discuss course material with a group of students from the class.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>I treat the course material as a starting point and try to develop my own ideas about it.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>I find it hard to stick to a study schedule.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>When I study for this class, I pull together information from different sources, such as lectures, readings, and discussions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>Before I study new course material thoroughly, I often skim it to see how it is organized.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>55.</td>
<td>I ask myself questions to make sure I understand the material I have been studying in this class.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>I try to change the way I study in order to fit the course requirements and the instructor's teaching style.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>I often find that I have been reading for this class but don't know what it was all about.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>I ask the instructor to clarify concepts I don't understand well.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>59.</td>
<td>I memorize key words to remind me of important concepts in this class.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>When course work is difficult, I either give up or only study the easy parts.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>not at all true of me</td>
<td>very true of me</td>
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<tr>
<td>61.</td>
<td>I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over when studying for this course.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>I try to relate ideas in this subject to those in other courses whenever possible.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>When I study for this course, I go over my class notes and make an outline of important concepts.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>When reading for this class, I try to relate the material to what I already know.</td>
<td>1 2 3 4 5 6 7</td>
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</tr>
<tr>
<td>65.</td>
<td>I have a regular place set aside for studying.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>66.</td>
<td>I try to play around with ideas of my own related to what I am learning in this course.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>When I study for this course, I write brief summaries of the main ideas from the readings and my class notes.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td>When I can’t understand the material in this course, I ask another student in this class for help.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>I try to understand the material in this class by making connections between the readings and the concepts from the lectures.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td>I make sure that I keep up with the weekly readings and assignments for this course.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>Whenever I read or hear an assertion or conclusion in this class, I think about possible alternatives.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>not at all true of me</td>
<td>1</td>
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<tr>
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<td>------------------------</td>
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</tr>
<tr>
<td>72.</td>
<td>I make lists of important items for this course and memorize the lists.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>73.</td>
<td>I attend this class regularly.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>74.</td>
<td>Even when course materials are dull and uninteresting, I manage to keep working until I finish.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>75.</td>
<td>I try to identify students in this class whom I can ask for help if necessary.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>76.</td>
<td>When studying for this course I try to determine which concepts I don't understand well.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>77.</td>
<td>I often find that I don't spend very much time on this course because of other activities.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>78.</td>
<td>When I study for this class, I set goals for myself in order to direct my activities in each study period.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>79.</td>
<td>If I get confused taking notes in class, I make sure I sort it out afterwards.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>80.</td>
<td>I rarely find time to review my notes or readings before an exam.</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>81.</td>
<td>I try to apply ideas from course readings in other class activities such as lecture and discussion.</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Appendix F
Weekly Journal

1. How many hours did you spend on your assignment this week?

2. Were you frustrated when trying to complete your assignment? Why or why not?

   If yes, how did you overcome your frustration?

3. How much time did you spend on your assignment before seeking help?

4. Whom did you ask for help and why?

5. Did you ask for the answer or did you just ask for a hint so that you could complete it on your own? Describe the situation.

6. Was it a pleasant experience?

7. Was it successful (i.e. did you get the help you needed)?

8. Did you use the Help Forum? Explain why or why not.
Appendix G

Interview Questions

1. Have you ever taken an online course before?
2. Why did you take this online course?
3. What were your expectations of taking an online class? (Would it be easy or difficult? Would you have more time? Would you spend less time on your assignments? )
4. Were your expectations met? Why or why not.
5. How is taking an online class different from taking a face-to-face course?
6. How do you study for this course? (Do you read the material before doing the assignments?) (Do you study on your own or do you study with friends?)
7. Give an example of a time when you sought help in this class.
8. Were you embarrassed to ask for help? Why or why not?
9. Do you believe that asking for help reflects negatively on your abilities? Why or why not?
10. Do you believe that the other students in the class would view you negatively if you asked for help on the discussion board?
11. Have you asked for help on the discussion board? Why or why not?
12. Would you consider yourself as having high or low self-esteem? How has this affected your help seeking behavior? Has it made you more open to seeking help or less open?
13. Has taking an online class been beneficial for you? How or why?
14. Has taking an online class been detrimental for you? How or why?
15. How do you communicate with your instructor?
16. Have you had any problems communicating with your instructor?
17. How many hours a week do you spend studying for this class?
18. What learning strategies do you normally use? (How do you study?)
19. Has taking an online class changed the learning strategies that you use? How?
20. How do you ask for help in a face-to-face class?
21. Has taking an online class changed how you seek help when needed with assignments? Why/Why not?
22. Would you take another online course? Why/Why not?
23. Have you encountered any problems taking an online course?
24. How would you change this online class to better meet your needs?
25. How would you change this online class to better meet your help seeking needs?
<table>
<thead>
<tr>
<th>Questions</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that I am too shy.</td>
<td>False</td>
</tr>
<tr>
<td>2. I have a high degree of self-confidence.</td>
<td>True</td>
</tr>
<tr>
<td>3. I have often wished that I were more creative.</td>
<td>False</td>
</tr>
<tr>
<td>4. I wish that I could be more persistent at things that I start.</td>
<td>False</td>
</tr>
<tr>
<td>5. I have little or no difficulty with school work.</td>
<td>True</td>
</tr>
<tr>
<td>6. I seem to have more personal problems than most people have.</td>
<td>False</td>
</tr>
<tr>
<td>7. I sometimes feel rather worthless.</td>
<td>False</td>
</tr>
<tr>
<td>8. I do not seem to make friends as easily as others do.</td>
<td>False</td>
</tr>
<tr>
<td>9. I fell that I have a good speaking voice.</td>
<td>True</td>
</tr>
<tr>
<td>10. I seem to do well at most everything I try.</td>
<td>True</td>
</tr>
<tr>
<td>11. I have often wished that I could get along with other people better.</td>
<td>False</td>
</tr>
<tr>
<td>Questions</td>
<td>Answer</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>12. I do not feel that I weigh more than I should.</td>
<td>True</td>
</tr>
<tr>
<td>13. I usually feel somewhat clumsy or awkward at parties or social gatherings.</td>
<td>False</td>
</tr>
<tr>
<td>14. I have often wished that I had more athletic ability.</td>
<td>False</td>
</tr>
<tr>
<td>15. I sometimes feel that I would rather be someone else.</td>
<td>False</td>
</tr>
<tr>
<td>16. I have often wished that I had more musical or artistic talent.</td>
<td>False</td>
</tr>
<tr>
<td>17. I overcome personal setbacks rather easily.</td>
<td>True</td>
</tr>
<tr>
<td>18. I feel that others find me to be an interesting person.</td>
<td>True</td>
</tr>
<tr>
<td>19. I have often wished that I were better looking.</td>
<td>False</td>
</tr>
<tr>
<td>20. I do not have much will power.</td>
<td>False</td>
</tr>
<tr>
<td>21. I feel that others enjoy my company at parties and social gatherings.</td>
<td>True</td>
</tr>
<tr>
<td>Questions</td>
<td>Answer</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>22. I sometimes feel that I don't know what I'm doing.</td>
<td>False</td>
</tr>
<tr>
<td>23. I feel that I have enough intelligence to accomplish almost anything I should desire.</td>
<td>True</td>
</tr>
<tr>
<td>24. I have often wished that I could keep myself better organized.</td>
<td>False</td>
</tr>
<tr>
<td>25. I feel that I become nervous or upset too readily.</td>
<td>False</td>
</tr>
<tr>
<td>26. I have difficulty standing up for myself.</td>
<td>False</td>
</tr>
<tr>
<td>27. I have often wished that I had better work habits.</td>
<td>False</td>
</tr>
</tbody>
</table>
Appendix I

Reverse Coded Items in the Motivated Strategies for Learning Questionnaire

**Reverse Coded Items: Metacognitive Self-Regulation**

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>During class time I often miss important points because I'm thinking of other things.</td>
</tr>
<tr>
<td>57</td>
<td>I often find that I have been reading for class but don't know what it was all about.</td>
</tr>
</tbody>
</table>

**Reverse Coded Items: Time and Study Environment**

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>I find it hard to stick to a study schedule.</td>
</tr>
<tr>
<td>77</td>
<td>I often find that I don't spend very much time on this course because of other activities.</td>
</tr>
<tr>
<td>80</td>
<td>I rarely find time to review my notes or readings before an exam.</td>
</tr>
</tbody>
</table>
### Reverse Coded Items: Effort Regulation

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>I often feel so lazy or bored when I study for this class that I quit before I finish what I planned to do.</td>
</tr>
<tr>
<td>60</td>
<td>When course work is difficult, I give up or only study the easy parts.</td>
</tr>
</tbody>
</table>

### Reverse Coded Items: Help Seeking

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Even if I have trouble learning the material in this class, I try to do the work on my own, without help from anyone.</td>
</tr>
</tbody>
</table>