



CHAPTER ONE

WHO IS THE VIRTUAL STUDENT?

There is an ongoing debate in the academic world about who is attracted to online learning. It has been assumed that it is predominantly adult learners who take online courses because online learning allows them to continue working full time and attend to their family obligations through the delivery of anytime, anywhere education. The “typical” online student is generally described as being over twenty-five years of age, employed, a caregiver, with some higher education already attained, and equally likely to be either male or female (Gilbert, 2001, p. 74). Online students may be nontraditional undergraduate, graduate, or continuing education students.

However, recent statistics published by the National Center for Education Statistics (2002) indicate that interest and enrollment in online courses spans all age groups. As of December 31, 1999, 65 percent of those age eighteen or younger had enrolled in an online course, indicating the increasing popularity of virtual high school courses. Fifty-seven percent of those considered to be traditional undergraduates, ages nineteen to twenty-three, had enrolled. Those ages twenty-four to twenty-nine enrolled at a rate of 56 percent, and those thirty and older enrolled at a rate of 63 percent. The statistics do agree that fairly equal numbers of men and women are enrolling, and with the exception of American Indians and Alaska Natives (of whom only 45 percent enroll), roughly 60 percent of all races enroll.

Many administrators have embraced online distance learning because they believe it represents a means by which to recruit adult students living some distance away from their campuses. The statistics cited, however, are an indicator that, increasingly, as institutions offer online courses they attract traditional undergraduates in residence on campus and not the geographically dispersed students administrators anticipated (Phipps and Merisotis, 1999). In addition, with the success of virtual high school programs across the United States, increasing numbers of high school students are making decisions about where they will go to college based on how “wired” the institution is and how many online course offerings it has in its curriculum. High school students who have experienced online learning want to be able to continue to learn this way in college.

The fact that online courses are being populated by students who are also taking face-to-face courses on campus is creating a set of concerns ranging from fees to assignment of faculty course loads—none of which is being addressed or resolved easily. However, these issues, although important, are not the focus of this book. Our focus is virtual students—who they are and what they need to be successful online. Instead of looking to demographics to paint a portrait of the online student, we believe faculty, instructional designers, and administrators need to look to the social psychology of online students to determine which ones are more likely to succeed and how to address their needs.

Satisfaction with Online Learning

It would seem obvious that when students are satisfied with their online courses and programs, they are more likely to be successful and to stick with them. The National Center for Education Statistics (2002) reports that undergraduates who participated in distance learning courses were more satisfied with those courses over face-to-face options 22.7 percent of the time. Forty-seven percent reported liking both distance learning courses and face-to-face courses about the same, and 30 percent were less satisfied with distance learning options. These statistics show that work needs to be done to improve the quality of offerings in distance learning. Although the same may be said for face-to-face classes, we contend that by focusing on the learner, the quality of online courses will improve; students will be more satisfied with the results and more likely to stay in the course.

Student retention in online courses has become a significant issue for administrators as they come to realize that these courses and programs are not inexpensive to create and run. Hardware and software are expensive, as are training, support and faculty pay for course development and delivery. Faculty, too, are concerned about retention issues. A community college instructor we spoke to stated

that he frequently overenrolled his online courses by about one-third to allow for attrition and so that the administration in his institution would not get upset with his enrollment figures. He also noted, however, that this greatly increased his workload as he attempted to track down the students who were having difficulty getting started or who were eventually going to drop his course anyway.

Studies have noted (Carr, 2000) that the very elements that draw students to online classes—convenience in a busy work schedule, ability to continue to attend to family demands—are the elements that interfere with their ability to remain enrolled. A recent e-mail from a student struggling with this dilemma is a case in point:

This email is being sent to formally let you know that I am unable to satisfactorily complete my course work, and to request that I be dropped from the program. This decision was fostered by many factors, work being one, and the others are family, time, and reality. As I mentioned to both of you this was a life long dream for me. The PhD was to be my swan song, my life statement, my mark. How wrong I was. All these things I expected the degree to afford me was already in my possession.

My family, has provided all the filler I needed for the empty spaces in my life. I guess you might [say] I was seeking an "A" in the wrong subject. I needed this humbling experience to bring me back to my reality. I needed to be reminded that what others think of me is insignificant in light of how my family see me. They stood by and watched me try to juggle time to accommodate this program, and one-by-one in their own special way they came to me and voiced their concerns.

I have truly appreciated the time I spent as a PhD student, though brief; I was once in the game and that will have to do. I wish you both the very best in life, thanks again. *Owen*

The issues involved in student retention will be discussed more comprehensively later in the book. But for now, looking at who virtual students are and what they need from their courses will help to provide a context for the specific suggestions we will be making throughout this book for creating truly learner-centered online courses and programs.

A Portrait of the Successful Virtual Student

Online courses and programs are simply not for everyone. The Illinois Online Network has published a list of qualities that taken together create the profile of the successful virtual student.

Clearly, first and foremost, in order to work virtually, the student needs to have *access to a computer and a modem or high-speed connection and the skills to use them*. Many institutions now publish minimum technology requirements in order for students to

complete their online courses. The virtual student needs at least to meet the minimum requirements, if not exceed them, in order to participate online. This is particularly true as we begin to push the limits of bandwidth to include elements such as streaming audio and video. However, it is important to remember that not all students have access to high-speed connections and are thus less able to access and download streaming media and large graphic files. Furthermore, some students—particularly working adults—may be attempting to access their courses from work and may encounter difficulties with security measures such as firewalls. They also have to contend with issues of privacy and confidentiality, conflicts with work time, and copyright and intellectual property as they apply to their workplaces. We recently conducted an online course where this was the case. One student kept sending us e-mails telling us that she could not access the course site. We went through our usual troubleshooting measures with her, asking about the browser she was using and if she had a high-speed connection, and made sure she was typing the correct URL for the course as well as entering her user name and password correctly. It was not until she successfully accessed the course from her home computer that we realized the problem was the firewall installed on the server at her workplace. Luckily, her employer was sympathetic to her needs and was willing to open the firewall to allow her access to her course. However, had she not attempted access from home, we might not have been able to diagnose the problem.

Successful virtual students are *open-minded* about sharing personal details about their lives, work, and other educational experiences. This is particularly important when we ask online learners to enter into learning communities in order to explore course material. Virtual students are able to use their experiences in the learning process and also are able to apply their learning in an ongoing way to their life experiences.

The virtual student is *not hindered by the absence of auditory or visual cues* in the communication process. In fact, he or she may be freed up by the lack of visual barriers that can hinder face-to-face communication. In addition, virtual students feel comfortable expressing themselves and contributing to a discussion through largely text-based means. This does not mean that the virtual student must possess exceptional writing skills to begin online study. Some instructors have found that writing skills improve with ongoing participation in online courses (Peterson, 2001).

Similarly, the virtual student is *self-motivated and self-disciplined*. “With the freedom and flexibility of the online environment comes responsibility. The online process takes a real commitment and discipline to keep up with the flow of the process” (Illinois Online Network, 2002). The virtual student also has the responsibility to communicate to the instructor and others if problems arise. Unlike the face-to-face classroom where the instructor is able to quickly identify who may be

having trouble with the course, the signs of a student in trouble online are different but equally obvious.

Instructors need to pay closer attention to the following indicators so that they do not miss them in an online class:

- Changes in level of participation
- Difficulty even getting started with the course
- Flaming other students or the instructor, meaning the inappropriate expression of emotions, particularly anger and frustration
- Dominating the discussion in inappropriate ways (Palloff and Pratt, 2001, pp. 112–113)

Virtual students are *willing to commit a significant amount of time to their studies weekly* and do not see the course as the “softer, easier way” to earn credits or a degree. In so doing, they commit to themselves and to the group that they will participate according to the guidelines set out by the instructor or institution. They recognize that if they do not, they are not only minimizing their own chances for success but also limiting the ability of their classmates to get the greatest benefit from the course. Thus, the virtual student is one who *can and does work collaboratively* with fellow learners in order to achieve his or her own learning objectives as well as the objectives set forth in the course.

Virtual students are or can be developed into *critical thinkers*. They recognize that the instructor acts as a facilitator of the online learning process and that in order to have the best online learning experience, they must take charge of that process themselves. This is an “aha” moment that virtual students are bound to have once they embark on the journey of online learning. Engaging in Internet research or following the trail that another student has suggested for supplementing the material in the course helps the student to see that knowledge creation occurs mutually and collaboratively online, leading to increasing critical thinking abilities.

Brookfield (1987) notes: “Being a critical thinker is part of what it means to be a developing person” (p. 1). The instructor can assist in the development of critical thinking skills by using various instructional techniques such as case studies, debates, simulations, and so on. “When helpers and educators work in these ways, they are encouraging critical thinking. Critical thinking is complex and frequently perplexing since it requires the suspension of belief and the jettisoning of assumptions previously accepted without question. As people strive for clarity in self-understanding, and as they try to change aspects of their lives, the opportunity to discuss these activities is enormously helpful” (p. 10). But it is the student who recognizes, through reflection on the learning that emerges from those activities, that

his or her knowledge base and ability to reflect critically is increasing. Furthermore, the *ability to reflect* is another critical quality for the successful virtual student.

Online learning is a transformative experience. The ability to read, reflect, and then respond opens the door to transformative learning; in other words, the student's perspective on what is being studied is transformed (Mezirow, 1990). Reflection often takes the form not only of processing the information presented but also exploring the meaning that the material has for the student's life, the changes that may need to be made to accommodate this new learning. It also means questioning where the ideas come from and how they were constructed. Often this is the element that helps to transform the student into a reflective practitioner (Palloff and Pratt, 1999). Furthermore, in the online classroom, the sharing of reflections transforms not only the individual learner but the group and the instructor as well.

Finally, and probably most importantly, the virtual student *believes that high-quality learning can happen anywhere and anytime*—not just in the face-to-face classroom. He or she does not feel the need to see and hear classmates or instructors in order to learn from them and feels comfortable working in a relatively unstructured setting.

Does This Represent the Ideal?

Does the profile just presented represent the ideal virtual student or the average virtual student? If a student does not completely match the profile, does this mean he or she will not be able to succeed online? We do not think so. Although many traditional undergraduate students—those in the eighteen- to twenty-one-year-old age group—can be successful online, they may not possess all of the qualities listed in the previous section. This does not mean, however, that they cannot be successful. We have found that the younger the students, or the lower the educational level (that is, undergraduate versus graduate), the more structure they need in the online environment. This does not mean that adult or graduate students do not need structure too. Creating structure in the online classroom means that the instructor needs to do such things as the following:

- *Create specific posting times*—that is, state in the course guidelines, for example, that the first response to a discussion question is due online by Wednesday of every week.
- *Be specific about the number of responses to other students' posts required weekly*—that is, determine that a student must respond to at least two other students in the group.
- *Be specific about the nature of the post and delineate what constitutes a substantive post.* “A post involves more than visiting the course site to check in and say hello. A post is considered to be a substantive contribution to the discussion wherein a student either comments on other posts or begins a new topic” (Palloff and Pratt, 1999, p. 100). Many students will post with “good job” or “I agree” or “I like

the way you think.” Although this type of post is important for the community-building process, students must be told that only substantive posts will count for the grade in the class.

- *Be specific and clear about all course expectations.* Students need to know exactly how they will earn a grade for the class, including how much of the grade is allocated for online participation and for assignments. Nothing should be left to assumption.
- *Stay on top of student participation and follow up if it changes.* If a student begins to drift away from the discussion or is consistently late with assignments, just as in the face-to-face classroom the instructor needs to follow up to see what might be interfering with good participation in the course and strive to assist the student in removing barriers or solving the interfering problems. This is something that does not often occur in the face-to-face classroom. We recently had a graduate student who was a very active participant in an online course. With three weeks left in the term, he suddenly disappeared from the discussion. We e-mailed him and received no response. After we sent a second e-mail, he called us to report that his brother had suffered a stroke and his attention had been diverted to family concerns. We worked with him to create a way to complete the course successfully and still attend to his family obligations. Had we not noticed his absence, however, we would not have learned about the problem.

Certainly, these suggestions can be helpful for all virtual students, but they can make or break the opportunity for success for the undergraduate. Thus, they are critical components of course design for them. We have found that by implementing clear guidelines and setting clear expectations in our courses, students who do not have the characteristics of the ideal online student to begin with will develop them. They are then prepared to move on to their future courses with a leg up and more readiness to tackle what is expected of them online.

Addressing the Needs of the Virtual Student

Knowing who the virtual student is and what his or her needs are online assists the instructor in designing a course that is responsive to those needs and that is truly learner-focused. If we review again the qualities that make for a successful virtual student, the specific instructional design techniques that will support that characteristic become more apparent:

- *The virtual student needs to have access to a computer and modem or high-speed connection and the skills to use them.*

Although we have seen significant increases in available bandwidth for online courses, and although many people now have access to high-speed connections at

home, courses should still be designed with learning outcomes and not the available technology in mind. A recent study (Daniel, 2001) noted that even when access to streaming media and the ability to download it was not a problem, students often bypassed those features when included in an online course. Instead they opted to go directly to the discussion board or a chat room in order to interact with the instructor and their student colleagues, feeling that the streaming media added little to the course. Consequently, we still believe that keeping it simple is the best way to convey the material being studied and that maximizing the use of the discussion board and community building will yield the most satisfying outcomes. When streaming media would serve the learning objectives of a course, the instructor may consider burning CD-ROMs containing audio or video clips so that students with slower or more limited access can still make use of them.

- *The virtual student is open-minded about sharing personal details about his or her life, work, and other educational experiences.*

When we invite the virtual student to help form a learning community with their student colleagues and the instructor, we need to make room for and expect a level of personal sharing that is crucial to the process. By creating social areas in the course, we allow for that sharing to take place. In addition, beginning the course with the posting of introductions, bios, or profiles allows students to start getting comfortable with their colleagues as human beings and not just as names on a screen. Furthermore, by creating assignments that allow and encourage students to bring in their own personal experience, we not only assist in the community-building process but also assist with knowledge retention through direct application of concepts. We will return to a discussion of the student role in the community-building process in Chapter Two.

- *The virtual student is not hindered by the absence of visual cues in the communication process.*

Our work has shown us that both the virtual student and the instructor develop what we have termed the *electronic personality*, allowing them to feel comfortable even without visual cues. We believe that in order for the electronic personality to exist, people must have certain abilities, including these:

- The ability to carry on an internal dialogue in order to formulate responses
- The creation of a semblance of privacy both in terms of the space from which the person communicates and the ability to create an internal sense of privacy
- The ability to deal with emotional issues in textual form
- The ability to create a mental picture of the partner in the communication process
- The ability to create a sense of presence online through the personalization of communications (Pratt, 1996, pp. 119–120)

If students do not have these abilities, they are likely to struggle and may decide that online learning is not for them. For some, all of our efforts at community building are not enough. These students need to be able to physically see and hear their classmates and instructor. This is a matter of preference and learning style, an issue we will return to later in the book. Consequently, we believe strongly that students and instructors should not be forced into the online classroom, but rather should be able to choose whether or not to take or teach courses in this manner.

Conversely, we have seen students who have been so freed by the absence of visual cues that they needed to be reminded about limits and boundaries. Some have shared intimate details of their personal lives that are inappropriate for the classroom, such as problems with a spouse or a child. In this case, it is important to communicate with the student individually and help him or her to contain the sharing. It may also be appropriate to refer a student to an adviser or counselor to deal with the issues raised in the classroom.

- *The virtual student is willing to commit a significant amount of time to his or her studies weekly and does not see the course as the “softer, easier way.”*

Students who are taking online courses for the first time often have no idea about the demands of online learning. Consequently, it is important to be clear about expectations and offer some guidelines about how much time students can expect to devote to the class each week. An orientation to the online learning process can also be helpful. When students know what to expect in terms of time commitments and are able to develop good time management skills, the likelihood that they will succeed in the course increases. In Chapter Six we offer suggestions for the creation of a good student orientation to online learning, and we suggest creating a frequently asked questions file or a brief class orientation that can be incorporated into an online class, regardless of what the institution itself offers.

- *The virtual student is or can be developed into a critical thinker.*

Offering activities in the course with the goal of developing critical thinking skills is essential in the delivery of a learner-centered course. Using case studies, simulations, shared facilitation, and jigsaw activities, where students add pieces of information and knowledge to create a coherent whole, helps to develop skills while more fully engaging the learners in the learning process. Collaborative activity “(a) lets a group of students formulate a shared goal for their learning process, (b) allows the students to use personal motivating problems-interests-experiences as springboards, (c) takes dialogue as the fundamental way of inquiry” (Christiansen and Dirkinck-Holmfeld, 1995, p. 1). In addition, students engaged in collaborative learning activities should be encouraged to evaluate those activities, their performance, and the performance of their peers collaboratively. This can take the form of a private e-mail to the instructor that contains an evaluation and suggests grades or a more public debriefing of the activity on the course site. Collison, Elbaum,

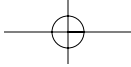
Haavind, and Tinker (2000) note in their advice to instructors that the development of critical thinking skills in learners becomes apparent when they—on their own and with one another—begin to use the types of interventions the instructor might use. In so doing, learners begin to realize the importance of sharpening a discussion's focus or thinking more deeply about topics. These authors state: "If you've done a good job of laying the support framework for pragmatic dialogue, the participants begin, at least partially, to facilitate their own dialogue" (p. 203). Consequently, if the instructor lays a good foundation for the course, the virtual student will pick up the ball and run with it. However it occurs, collaborative activity is the heart of a learner-centered online course.

- *The successful virtual student has the critical ability to reflect.*

Reflection—whether on the results of a collaborative activity, on the learning process, or on course content—is a hallmark of online learning. Consequently, the virtual student needs to be encouraged to reflect through direct questions. Also, space must be provided in the course to allow for reflection on the various aspects of online learning. We always create a discussion forum in our courses for reflection and encourage students to post their thoughts there as they go. The reflections may include what they have learned about the courseware in use. They may reflect on the application of a piece of learning to their lives or on the significance of something they have read or found on the Internet. We always encourage them to reflect on the course as they go and then use this formative evaluation material to improve what may be happening in the course at the moment or as summative evaluation material to improve the next iteration of the course. Just asking students to respond to discussion questions and the postings of their peers begins the process of reflection. Students learn that one of the beauties of online learning is that they can take the time to reflect on the material being studied as well as the ideas of their peers before composing their own responses. Encouraging students to compose off-line rather than at the moment also assists with the reflective process.

- *Finally, and probably most important, the virtual student holds a belief that high-quality learning can happen anywhere and anytime.*

The virtual student needs to be flexible and open to new experiences and ideas. If students look for traditional educational experiences, where the instructor is the source of knowledge and direction, in a nontraditional setting such as the online classroom, where knowledge and meaning is co-created through participation in a learning community, it will only lead to frustration. Helping students understand that education online does not occur by interacting solely with the instructor is the first step in this process. The online student can be developed into a lifelong learner, seeking out knowledge wherever it may lie and through interaction with peers, other professionals, and their instructors. The following student post illustrates this



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concept well:

I think Rena's point is well taken, and yours is accurate as well . . . with much of the scene setting done before the class begins, during the actual experience, the facilitator can almost be invisible as far as the process is concerned, as long as the class stays on track and behaves appropriately. Rather than direct the experience by leading and asking others to follow, as in most f2f [face-to-face] classes, the facilitator constructs a world to be explored and discovered. If the group loses its way, or seems to be banging its head against a wall, the facilitator can lend a hand and gently redirect in an interventional manner unobtrusive to the discovery and learning processes. At least that's been my experience. *Peggy*

Concluding Thoughts

Table 1.1 summarizes the concepts introduced in this chapter. It links the characteristics of online learners, which can be categorized into seven general areas—access, openness, communication skills, commitment, collaboration, reflection, and flexibility—with instructional techniques that support the development of those characteristics.

Instructors need to help students understand their important role in the learning process. In the next chapter, we will explore the concept of the online learning community in greater depth and discuss the student's important role in its formation.

TABLE 1.1. LEARNER-FOCUSED INSTRUCTIONAL TECHNIQUES TO SUPPORT ONLINE LEARNERS.

Characteristics of Online Learners	Learner-Focused Instructional Techniques
Access and skills	<ul style="list-style-type: none"> • Use only technology that serves learning objectives. • Keep the technology as simple as possible so that it becomes transparent to the user. • Be sure that learners have the skills to use the technology for the course through surveys, quizzes, or the completion of technology orientations. • Design web pages that contain only one page of text and graphics. • Limit use of audio and video if you use it at all. • Make sure there is judicious use of synchronous discussion, known as chat.
Openness	<ul style="list-style-type: none"> • Begin course with introductions, posting of bios, or completion of profiles.

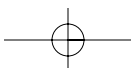


TABLE 1.1. (CONTINUED).

Characteristics of Online Learners	Learner-Focused Instructional Techniques
Communication	<ul style="list-style-type: none"> • Use icebreaker exercises early in the class to get learners to know one another. • Use experience-based exercises and problem-based learning activities. • Include a social area or student lounge in the course. • Post guidelines for communication, including netiquette guidelines. • Model good communication. • Explain what constitutes a substantive post to the discussion. • Encourage participation in the creation of course guidelines. • Follow up with nonparticipants or students whose level of participation changes.
Commitment	<ul style="list-style-type: none"> • Post clear expectations of time demands for students. • Develop and post clear expectations for assignments, assignment completion deadlines, and means by which a grade will be earned. • Be clear about posting requirements; consider creating a specific posting time line. • Support the development of good time management skills.
Collaboration	<ul style="list-style-type: none"> • Include case studies, small group work, jigsaw activities, simulations, and rotated facilitation to foster critical thinking skills. • Have students post their assignments to the course site with the expectation that they will provide critical feedback to one another on their work. • Ask open-ended questions to stimulate discussion, and encourage students to do the same.
Reflection	<ul style="list-style-type: none"> • Impose a twenty-four-hour rule for response to postings to allow for reflective responses. • Encourage students to compose responses off-line and then copy and paste to the course site. • Include a reflections area in the course and encourage its use. • Ask open-ended discussion questions that encourage reflection on and integration of material.
Flexibility	<ul style="list-style-type: none"> • Vary course activities to address all learning styles and to provide additional interest and multiple approaches to the topic. • Negotiate course guidelines with the learners to achieve buy-in to the course. • Include the Internet as a teaching tool and resource, and encourage students to seek out references that they can share.