The changing focus of education: how Rowan University professors view the shift toward online education

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THE CHANGING FOCUS OF EDUCATION: HOW ROWAN UNIVERSITY
PROFESSORS VIEW THE SHIFT TOWARD ONLINE EDUCATION

by

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ABSTRACT

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THE CHANGING FOCUS OF EDUCATION: HOW ROWAN UNIVERSITY PROFESSORS VIEW THE SHIFT TOWARD ONLINE EDUCATION
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This study explores Rowan University professors’ attitudes toward online education and its increasing prevalence. The researcher used an online survey program by which participants’ feedback was gathered. The survey was sent to 201 Rowan University professors, and the data was analyzed with the computer program, Statistical Package for the Social Sciences (SPSS) to obtain calculations and percentages. The survey results are presented in both narrative and chart form.

The researcher concluded that from the results of the study that Rowan University professors’ have diverse opinions about online education, but also recognize the value in this asset to higher education. Specific data demonstrates a favorable view of the potential for the further development of Rowan University’s online presence.
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CHAPTER I
INTRODUCTION

Rowan University, an 87-year-old institution founded in 1923 as a normal school, is divided into seven academic colleges: Business, Communication, Education, Engineering, Fine & Performing Arts, Liberal Arts & Sciences, the College of Professional and Continuing Education and a Graduate School. The university has entered the world of online education. The author researched Rowan University professors’ attitudes toward online education and its ever increasing prevalence.

Statement of the problem

Today, society and social institutions are being reshaped by the rapid advances in information technology. Technology has vastly increased the capacity to know and to do things, and to communicate and collaborate with others. It allows us to transmit information quickly and widely, linking distant places and disparate areas of endeavor in new productive ways. Technology allows us to form and sustain communities for work, play, and learning in ways unimaginable just a decade ago. Information technology changes the relationship between people and knowledge, and it has reshaped colleges and universities (Duderstadt, Atkins, & Van Houweling, 2002). Technology is changing the way people teach and learn. As student needs continue to change, technology has come to play a far greater role in higher education.

Colleges and universities are using technologies to expand their campuses and to
satisfy the ever changing needs of their students. The learning environment has changed (Harwood & Asal, 2007 p. 17). Many institutions of higher education have adopted online education and web-based instruction. Institutions have begun to question and redefine their conceptions of what constitutes a quality learning experience in the context of a ubiquitous, mediated communications environment and have begun to understand where they really do add value. By revisiting their core values, institutions are recognizing a need to change, and are realizing that online education may be the catalyst and means to significantly enhance the scholarly culture and learning environment (Garrison & Anderson, 2003 p. 105).

In the fall of 2006 Rowan University started its newest academic college, The College of Continuing and Professional Education headed by Dean Horacio Sosa, Ph.D. Dr. Sosa describes the college as being, “A university that serves the whole community, including those who have busy personal and professional lives and want to advance their education at their own pace” (Sosa, 2009). Sosa also writes on The College of Continuing and Professional education website:

“The College is seen as a vehicle to offer existing degrees and courses to a different population of students through different modes of delivery. At the current time, the programs are offered in either the traditional classroom at an accelerated pace, online, or on-site in the evening and weekends. Involvement from the other colleges is completely optional.”(Sosa, 2009)

What does this mean for the over 400 professors teaching courses on campus? How do they view the shift from the academic classroom to online education? Rowan University is doing what it can to meet the needs of the current and prospective students. However, the question remains regarding the needs of the professors. The author
explored the following: Do Rowan University professors have favorable or unfavorable opinions about the quality of education online courses provide; and what suggestions, if any, did Rowan University professors have concerning implementing online education courses. The author of this study attempted to learn

the overall satisfaction of the professors and professors’ views on online education at Rowan University.

Background Information

The Internet started in 1969 as a U.S. government experiment connecting a few defense agencies. It has developed within three decades into a mass information and communication medium. During the early 1980s and 1990s, online education and networking saw enormous innovation and expansion at all levels of education. Ithiel de la Sola Pool, a pioneer in the field of social sciences and a groundbreaking leader in the study of technology and its effects on society (1984) wrote, “It has been argued that computer-based communication is the most fundamental change in communications technology in the last 150 years” (Garrison & Anderson, 2003, p. 1). Jacques Attali, the author of Millennium: Winners and Losers in the Coming World Order (1991) takes the Internet and information technology to a higher level and describes the impact of information technology as being, “Even more radical than the harnessing of steam and electricity in the 19th century. Rather it will be more akin to the discovery of fire by early ancestors, since it will prepare the way for a revolutionary leap into a new age that will profoundly transform human culture” (Duderstadt, Atkins, & Van Houweling, 2002, p. 1).
The Internet has become an essential part of daily lives. Consequently, online education has made a huge impact on many colleges and universities. Walter S. Baer, author of *Will the Internet Transform Higher Education?* (1998) writes:

“As higher education faces formidable challenges caused by changing student demographics, severe financial constraints, and lingering institutional inflexibilities, institutions of higher education are turning to new communications and information technologies that promise to increase access, improve the quality of instruction, and (perhaps) control costs and the Internet with using online education and web-based instruction has been able to offer this to colleges and universities.” (Baer, 1998, p. 1)

Writing in *Critical Success Factors in Online Education* (2000) Professor Thierry Volery and manager Deborah Lord discuss the reasons for embracing online education and the need for colleges and universities to establish online education programs to remain a contender in the business of higher education. The authors break down the reasons higher education institutions embrace online education and how they often fall into four broad categories: expanding access, alleviating capacity constraints, capitalizing on emerging market opportunities and serving as a catalyst for institutional transformation.

The authors explain the need for most states to expand access to education in order to meet the education and training needs of state residents and companies, and to educate under-served populations. For many, academic program calendars have not matched work and family responsibilities, and program offerings may not have met learner needs. Some are hoping to leverage the scalability of online education to avoid overwhelming their bricks-and-mortar capacities (p. 216).
Emerging market opportunities show that the public's growing acceptance of the value of lifelong learning has fueled an increased demand for higher education services among people outside the traditional 18-24-age range. Emerging student segments, such as executives seeking further education, and working adults, may be more lucrative than traditional markets. By capitalizing on emerging market opportunities, many educational institutions hope to generate significant revenue (p. 216). Finally, institutional transformation shows that many higher education institutions are being challenged to adapt rapidly to a decrease in public funding and to an increasingly competitive environment. Distance education can catalyze institutional transformation (p. 216).

Education content is moving toward online education and web-based instruction because of user friendly, available technology. According to Linda Harasim, author of *Shift happens: Online education as a new paradigm in learning* writes, “Online learning is no longer peripheral or supplementary; it has become an integral part of mainstream society” (Harasim, 2000, p. 59). “Higher education cannot operate in isolation and must respond to societal change. Web-based instruction is growing faster than any other instructional technology (Daugherty & Funke, 1998, p. 2),” says D.M. Crossman author of *The evolution of the World Wide Web as an emerging technology tool* (1997) “More and more university faculty are using web based instruction as an integral part of instructional activities. The rationale for providing this platform for learning is sound”(Daugherty & Funke, p. 2).

According to Martha Daugherty and Barbara L. Funke (1998), authors of *University Faculty and Students Perceptions of Web-Based Instruction*, “We are at a point in the history of higher education when radical changes are occurring in
instructional delivery system models. Universities are witnessing a profound increase in the use of multimedia presentations, video teleconferencing, and, more currently, Web-based course instruction. These technological innovations have a direct impact on current university practices and policies and subsequently have the potential to alter our traditional definitions of education” (Daugherty & Funke, 1998, p. 2).

**Purpose of Study**

The author attempted to reveal the current trends in online education and how universities are changing their teaching styles to accommodate the need for online classes and programs in higher education. The purpose of the study was to learn the perceptions of Rowan University professors and their views about online education and web-based instruction. In addition, the author sought to reveal the future direction of online education and web-based instruction at the university and where professors find themselves with respect to their position on the topic.

The author plans to focus on identifying the perceptions of Rowan University professors. The study seeks to identify professor’s opinions regarding the need and the willingness of Rowan University to adopt web-based instruction as a part of the curriculum.

**Assumptions**

The author assumed that the subjects were honest and withheld bias when responding to the survey questions.

**Delimitations**

This study focused solely on the professors at Rowan University and their perceptions of online education and using this style of teaching versus traditional classrooms. A comparison study involving the analysis of other online education
programs at other universities and the perceptions and satisfactions of their professors was not included.

Only current professors at Rowan University were used in this study because they are the present faculty who are involved in the on-going changes of online education and web based instruction on campus. Therefore, this study does not represent the attitudes and perceptions of past or future faculty members.

This study only sought the opinion and perceptions of the Rowan University faculty. The study did not seek student opinions on online education or web based instruction. Therefore, the study represented only the viewpoints of those teaching these classes and not those of students.

**Procedures**

Surveys and interviews were administered to the Rowan University professors. The author posits that Rowan University professors in traditional classroom settings were not ready to expand to online courses and education. The author attempted to learn how Rowan University professors view this shift in education, and if they are ready to evolve their programs and methods into an online course. A random sample of 201 faculty members was distributed to Rowan University professors. Following the survey, five personal interviews were conducted. The qualitative portion of the study sought to gauge Rowan University professors’ motivations, ideas, outlooks and experiences in relation to online education. This was done through open-ended questions on a survey and in-person interviews. The quantitative portion measured attitudes and perceptions through the survey sections comprised of measurable closed-ended questions.
Definition of terms

*Distance learning* - sometimes called e-learning. It is a formalized teaching and learning system specifically designed to be carried out remotely by using electronic communication. Because distance learning is less expensive to support and is not constrained by geographic considerations, it offers opportunities in situations where traditional education has difficulty operating. Students with scheduling or distance problems can benefit, as can employees, because distance education can be more flexible in terms of time and can be delivered virtually anywhere (Passerini & Granger, 2000, p. 1).

*Online Education* - credit-granting courses or education training delivered primarily via the Internet to students at remote locations, including their homes. Online courses may be delivered synchronously or asynchronously.

*Web-based instruction (WBI)* - is defined as an innovative approach for delivering instruction to a remote audience using the World Wide Web as the instructional delivery system (Khan, 1998). Web-based learning environments use the resources of the Web to create a context in which learning is supported and fostered. The Web offers many unique characteristics and features for both educator and student. These attributes range from cost effectiveness from a university business perspective to convenience and flexibility of structure for the students (Jafari, 1997).

*Computer Mediated Networks (CMC)* - Refers to the use of networks of computers to facilitate interaction between spatially separated learners; these technologies include electronic mail, computer conferencing, and on-line databases. The most prominent
applications of CMC computer conferencing and electronic mail-support sophisticated synchronous (real-time) or asynchronous (delayed) group communication (Kubala, 1998).
CHAPTER II

REVIEW OF RELATED LITERATURE

Ernest L. Boyer, an American educator who served as Chancellor of the State University of New York, United States Commissioner of Education, and President of the Carnegie Foundation for the Advancement of Teaching, declared that “A public demands to have education on its own terms, at its own convenience, and at any age level.” Boyer said this in 1972 and the message still remains the same. People want to receive an education that fits their needs, that works with their schedule and can be accomplished at any point in their life. Online education has been the answer for many people.

To understand the trend of online education in higher education, readers must first comprehend how colleges and universities have reached this new wave of learning. The author examined the trends in online education and why colleges and universities have chosen this form of teaching and education. This included different types of web-based instruction and how it has developed over the years and who is enrolling for this type of learning. Following the trends in online education, the author explored the net generation, millennial students born between 1981-2000. Generation Y as they are also called, are the first generation to grow up digital and who are being educated now. The final section of this chapter focuses on online education and the new roles professors play in these online learning spaces.
Trends in Online Education

For colleges and universities to adopt online education there had to have been a significant transformation in society and in social institutions. This transformation is the rapidly evolving information technology. The rapid evolution into a knowledge-based society has been driven by the emergence of powerful technologies such as computers, communication networks, and other digital devices (Duderstadt, Atkins, & Van Houweling, 2002 p. 7). The proliferation of the personal computer, combined with the Internet, has precipitated far-reaching changes in society (Garrison & Anderson, 2003 p. 1). Society in general, along with social institutions, is in the digital age. The Internet started as a government experiment, but over time grew into a communication medium that has changed every aspect of life from the simple day-to-day routines, to businesses, and of course education. The prevalence of technology continues to accelerate with no slow-down insight. Today, it appears difficult to find a traditional classroom where there is no technology being used. Online delivery has generated tremendous excitement, both inside and outside higher education. For some it offers the potential to provide learning to new audiences, to alleviate capacity constraints, and to capitalize on emerging market opportunities. For others, it is not a progressive trend toward a new era at all, but a regressive trend toward mass-production, standardization, and purely commercial interests (Volery, 2001 p. 77).

In the past, distance education has taken on a number of names and roles in the classroom. To get to online education, colleges and universities had to start somewhere, and for many they started with distance learning courses.
“Distance learning courses were originally intended to cater particularly to students disadvantaged by their geographical remoteness from university campuses. With the development of the postal system in the nineteenth century, commercial correspondence colleges provided distance education to students across the country.” (Volery, 2001 p. 78)

This makes distance learning neither a recent nor a new phenomenon, the development and adoption of sophisticated communication technologies often creates that impression (McGorry, 2002 p. 159). As time went on, most students took advantage of these courses for their convenience and flexibility. Distance learning courses became a way for students to complete courses from home without having to travel to campus. But, these courses lacked face-to-face interaction with professors. Course materials and contact with instructors relied on traditional communications such as print, radio, video or telephone or newer technologies such electronic communication. Distance learning can be defined as any approach to education delivery that replaces the same-time, same-place, face-to-face environment of a traditional classroom (Volery, 2001 p. 78 & 79). Distance education has grown from just print communication with a professor to entering into a new era of distance education using technology and the Internet to form online learning communities among students and have professors practice web-based instruction.

Online learning can consist of three types of courses: web facilitated, blended hybrid, and completely online. Web facilitated courses use web based technology to facilitate what is essentially a face-to-face course. It can use a course management system or web pages to post the syllabus and assignments (Allen & Seaman, 2008 p. 4). An example of this is the web-based software program Blackboard-CE. Blackboard-CE allows professors to organize course content and assignments online for students.
Blended, or hybrid, courses are a blend of conventional face-to-face instruction and online content. Blended or hybrid courses bring together classroom and technology as essential partners in instructional design. A course designed using this method moves a significant portion of the learning activities to the web, typically using online discussions and reduces the amount of seat time in a classroom (Koohang & Durante, 2003 p. 106).

Online courses deliver most, or all, of the content using the Internet as the distribution channel for that content. These types of courses typically have no face-to-face meetings. Uses may include the provision of student access to learning resources, the facilitation of communication and collaborative working among and between students, and the provision of administrative and student support. Online courses go beyond traditional computer learning as it makes full use of the Internet and other digital technologies. Online courses can make course material accessible anytime, anywhere (Volery, 2001 p. 79-80).

In the mid-1990s, the Internet was hailed as the promising tool for connecting the remote teacher and learner (Koohang & Durante, 2003 p. 105). Online education has grown and flourished over the past decade, and today it remains a vital tool in formal education. Online education and technology have created a heavy dependency on all aspects of learning and have reshaped schools, universities and classrooms. Teaching is no longer confined to a time and place. With computer and communication technologies, the teacher and the student become spatially and temporally dispersed learners. The time and physical boundaries of the traditional classroom are stretched to a learning space (Khalifa & Lam, 2002 p. 350). Computers and networks have the potential to deliver educational services to anyone, anyplace, anytime, no longer confined to the campus or
the academic schedule (Duderstadt, Atkins, & Van Houweling, 2002). Author Ginger Rosenkrans writing in Design considerations for an effective online environment (2001) sums up the general attitude of online education. She writes, “Online courses provide the necessary freedom of time and place sought by students” (p. 43).

Enrollments in Online Education

Online education has become more common throughout a wide variety of learning institutions, but who are the students enrolling in these courses and programs? In the past, online education has been ideal for adult learners, and has mainly focused on educating these life long learners. An adult learner is someone who does not meet the traditional definition of a college student, this could be for many reasons including; being employed full-time, having children, a veteran of the United States military who recently returned to the civilian world after serving in the armed forces, or a student who commutes to campus.

“Life long learning can refer primarily to those forms of learning throughout life that are called for by social and cultural change. The rate of social, technical, economic, and other change is so great, at least in industrialized countries, that few people will hold the same job throughout their lifetime. Similarly, recent research on learning across the lifespan has shown that people are not only capable of, but actually engage in, continuing learning over their active life and beyond. Although lifelong learning can be self-directed, a variety of agencies such as corporations, professional associations, unions, and community groups also represent an extraordinarily rich and diverse repository of learning opportunities.” (Volery, 2001 p. 79)
Adult learners juggle numerous roles, not only being a student, but many have full time careers, families, and other obligations. That is why courses and programs online have always been attractive for these students.

Today, in a knowledge economy that increasingly requires individuals to attend to their education and training needs on a lifelong basis, it is of little surprise that adults still comprise more than half of all higher education enrollments. Many of these adults strive to meet their education and training needs – as well as personal enrichment needs–through part-time, evening, online, and weekend courses, certificate programs, and degree programs at schools who offer these courses and programs (Eduventures, Inc. 2004 p. 1).

In October and November of 2004 a study was conducted by the Eduventures Learning Collaborative for Higher Education program in Continuing and Professional Education. Eduventures Learning Collaborative for Higher Education program in Continuing and Professional Education is a private that does research and consulting for higher education institutions. This study sought to learn the motivations for adults seeking to enroll in continuing education courses. The study assisted continuing and professional education institutions in better understanding changes in demand for programs among individual continuing education consumers, the purchasing decision criteria employed by continuing education consumers to evaluate their educational options, and consumers’ preferences with respect to marketing messages and the web, print, or other vehicles for delivering those messages. More than 6,100 adult learners participated in the web survey study (Eduventures, Inc. 2004 p. 5).
The study gave insight into the non-traditional student population. The authors of the study divided the student population into three categories: Career Advancers, Enrichment Seekers/Career Changers, and Regulatory Compliers. Career advancers are primarily motivated by job performance improvement and promotion. Enrichment seekers/career changers are motivated by both personal rewards and the prospect of switching fields, and they seek to expand their knowledge about a certain topic or subject. Enrichment seekers frequently become career changers. Regulatory compliers are motivated or required by their jobs or laws to maintain certain licensures and certifications (p. 6). The authors concluded that nearly 83 percent of continuing education students reported that education was key in helping them to realize their future career plans, and almost 78 percent stated that the value of the education they received exceeded the cost of it. Lastly, the authors reported the highest motivator for non-traditional students to enroll in continuing education courses was for personal enrichment. Other reasons for enrolling that were also reported as high motivators were improved job performance, prospects for a new job in their current field will be better, prospects for a promotion will be higher, changing careers, and professional requirements like licensing, credentials, or certifications.

*Learner’s Perceptions toward the Web-based Distance Learning Activities/Assignments Portion of an Undergraduate Hybrid Instructional Model* (2003) a study conducted by Alex Koohang and Angela Durante studied learners’ perceptions toward the web-based distance learning activities/assignments portion in hybrid programs using adult students. The authors concluded that adult students are more likely to be involved in distance education programs. The authors show how adult students are
characteristically independent learners who are self-directed in establishing their learning objectives. Adult learners tend to self-select, knowing their success requires self-discipline and good time management. Enrolling in a hybrid course relies on a students’ self motivation (p. 106).

Adult learners are no longer the only students enrolling in online education courses. A recent study completed by Babson Survey Research Group, *Staying the Course, Online Education in the United States, 2008* found that online enrollments have continued to grow at rates far in excess of the total higher education student population, with the most recent data demonstrating no signs of slowing (p. 1). Over 3.9 million students were taking at least one online course during the fall 2007 term, a 12 percent increase over the number reported the previous year (p. 1). Of the 3.9 million, over 80 percent studied at the undergraduate level, with only 14 percent taking graduate level courses.

Because of the development and the availability of online courses, college and universities have seen enrollments increase from diverse groups of students. These students are a mixture that differs in age, job experience, and reasons for enrolling in online education courses. For many undergraduate and some graduate students, online courses offer a service of convenience due to the increasing roles and obligations students have gained such as jobs, family commitments, and other personal commitments.

Another reason many people search for online courses is due to economic hardships, such as the loss of a job. Bad economic times have often been good for education, either because of decreased availability of good jobs encourages more people
to seek education, or because those currently employed seek to improve their chances for advancement by pursuing their education. The results from the Babson Survey Research Group, *Staying the Course, Online Education in the United States, 2008* show that institutions of higher education believe that rising unemployment rates being experienced will result in increases in online course enrollments (Allen & Seaman, 2008 p. 9).

Another possible reason for the rise in online courses is the current rise in fuel costs. Institutions of higher education that largely serve commuting students see the largest potential impact of students enrolling in online courses. Allen & Seaman’s 2008 study shows a widespread agreement that higher fuel costs will lead to more students selecting online courses (p. 10).

**The Net Generation**

Colleges and universities are facing a period in which the role and functionality of universities will be redefined and reshaped to suit the requirements of a varied student population who require greater flexibility and more options (Jones-Dwyer & Pospisil 2004, p. 194). The first wave of a new generation of students, the millennials, generation Y or the net generation as they are called, have been exposed to technology from an early age. The millennial generation exhibits different characteristics compared with previous generations, which implies that for this generation requirements and expectations of the learning environment are likely to be quite unlike that of previous generations (Jones-Dwyer & Pospisil 2004, p. 194).

The net generation, students born from the years 1981-2000, have grown up with technology. Members of this generation were born around the time the personal computer
was introduced, and 20 percent report using computers between the age of 5 and 8. Virtually all net generation students were using computers by the time they were 16 to 18 years of age (Oblinger & Oblinger, p. 1). This generation is seen as exceptionally curious, self-reliant, contrarian, smart, focused, able to adapt, and high in self-esteem. It is perceived to have a global orientation. Millennials are use to doing several things simultaneously. They do not concentrate on one activity at a time and accept multitasking as the norm. There has been a change in the way these students gather, accept and retain information. The net generation is a culture of interaction, and computers are an integral part of this culture (Tapscott, 1998).

Don Tapscott, the author of *Growing Up Digital: The Rise of the Net Generation*, shows the net generation’s need for learning shifting from a broadcast learning to what he calls interactive learning. The author gives eight shifts of interactive learning, providing educators and students a new more powerful and effective learning paradigm.

The first shift is from linear to hypermedia learning. Traditional approaches to learning are linear. Books, stories, TV shows, and instructional videos are all linear and start from beginning to end. However, most millennials access to information is more interactive and non-sequential. The second shift is from instruction to construction and discovery. This shift can be described as the constructivist approach. Constructionism argues that people learn best by doing rather than simply being told. When students have a fact or concept they discovered on their own, it is much more likely to be meaningful and retained than the same fact being written out on the board (p. 6-7).
The third shift is from teacher-centered to learner-centered education. The shift suggests the new media enables centering of the learning experience on the individual rather than on the transmitter (p. 7). The fourth shift is from absorbing material to learning how to navigate and how to learn. This shift includes learning how to synthesize, not just analyze. Millennials assess and analyze facts, but more importantly they synthesize and engage with the information sources and other people on the Internet to then build or construct higher level structures and mental images (p. 8). The fifth shift is from school to lifelong learning. Millennials are entering a world of lifelong learning from day one. They do not just learn a trade or a profession like most previous generations have done; rather, learning will be a continuous and a lifelong process for them (p. 8).

The sixth shift is from one-size-fits-all to customized learning. Schooling is a mass production idea. Teach the same thing to students, in the same way and assess all in the same way. Interactive learning enables students to be treated as individuals. Teaching becomes developing highly customized learning experiences based on students background, individual talents, age-level, cognitive styles, interpersonal preferences and so-on (p. 8-9). The seventh shift is from learning as torture as learning to learning as fun. For many students sitting in class all day is not the highlight of their day. Using new technology and media in the classroom, the learner becomes the entertainer and in doing so builds enjoyment, motivation, and responsibility for learning (p. 9). Finally, the eighth and last shift is from the teacher as transmitter to teacher as facilitator. Leaning becomes a social activity, facilitated by a new generation of educators. The teacher is not an
instructional transmitter. The teacher becomes a facilitator to social learning whereby learners construct their own knowledge. Consequently, entire generation of teachers will need to learn new tools, new approaches and new skills (p. 10).

Authors Diana Jonas-Dwyer and Romana Pospisil writing in, *The Millennial effect: Implications for academic development* (2004), explore the characteristics of the changing student population in Australian Universities, and the changing requirements and expectations of the students. The authors identify a future vision for academic development that fosters a holistic approach to dealing with the challenges ahead. The authors state that applying a holistic approach to learning in higher education with a strong emphasis on more learner-centered design and the development of blended learning environments may assist universities and academic staff in adapting to the demands of a new generation and the expectations of the earlier generations (p. 195). To help bridge the gap, the adoption of a holistic approach can help academic development. In this approach the factors impacting on teaching and learning are considered and multiple strategies, applied simultaneously, are suggested to assist academics to develop a greater awareness of student needs and learning styles, teaching styles, educational design, and to increase their technology skills. The seven factors that contribute to a holistic academic development approach are consider the university’s strategic direction, know the culture of the university, know the students’ characteristics, encourage staff to be aware of their preferred teaching style and philosophy and to experiment with other approaches, become conversant in applying educational design principles, consider technological innovations,
and investigate the university’s infrastructure to establish feasibility (p. 202). According to Oblinger and Oblinger, technology has changed the net generation, just as it is now changing higher education (p. 9).

**Professors and Online Education**

As access to the Internet has continued to grow, web-based learning has continued to expand. An estimated 2 million students in the United States are taking post-secondary courses that are fully delivered online. Millions of other students at all educational levels participate online in hybrid and web-enhanced face-to-face courses. However, the effectiveness of online courses, particularly in relation to individual student needs, perceptions, and student-outcome, is sometimes questioned (Picciano, 2002 p. 21).

Traditional or face-to-face instructional environments have been criticized because they encourage passive learning, ignore individual differences and needs of the learners, and do not pay attention to problem solving, critical thinking or other higher order thinking skills. New advances in Internet-based technology have brought challenges and opportunities to education and training, particularly through online instruction. (Johnson, Aragon, Shaik, Palma-Rivas, 2000 p. 29)

While online instruction is gaining popularity, it is not free from criticism. Many educators and trainers do not support online instruction because they do not believe it actually solves difficult teaching and learning problems, while others are concerned about the many barriers that hinder effective online teaching and learning. These concerns include the changing nature of technology, the complexity of networked systems, the lack of stability in online learning environments, and the limited understanding of how much students and instructors need to know to successfully participate. Online instruction also
threatens to commercialize education, isolate students and faculty, and may reduce 
standards or even devalue university degrees (Johnson, Aragon, Shaik, Palma-Rivas, 

Many challenges must be addressed before online education can be fully accepted 
by the mainstream public and educational community. Primary among these challenges is 
how to meet the expectations and needs of both the instructor and the student and how to 
design online courses so they provide a satisfying and effective learning environment 
(Johnson, Aragon, Sharik, Palma-Rivas, 2000 p. 31). With the constant back and forth 
debate of whether higher education institutions should develop online education 
programs, where does this leave professors at these higher education institutions? This 
section of the literature review will research feelings toward online education from 
professors who are for and against online education. This section will help to show why 
conducting a study on this topic at a higher education institution that is just beginning 
online programs is necessary to get the true perspectives of the professors that are going 
to be faced with this challenge.

Writing is Distance Education: Facing the Faculty Challenge (2001), author 
Beverly L. Bower describes the hardships she is faced with as a faculty member at 
Florida State University with participating in distance learning and other technology 
related endeavors. “As faculty we are warned that if we don’t “get with the program” our 
institutions will suffer and our jobs will be lost to more technologically, bottom-lined 
oriented organizations such as the University of Phoenix,” says Bower. “Most faculty are
trained in “hand to hand” teaching. They expect and are accustomed to direct engagement with students. Personal interaction with students is one of the most gratifying aspects of teaching” (p. 1). In her article she continues to write that:

"Web-based instruction creates a major change in the way instruction is delivered. It requires new skills for both the teacher and the student. It shifts the educational experience from teacher centered to learner centered. To create an equal experience in the online education courses requires more planning on the part of the instructor and more effort on the student’s part. It makes the teacher more of a facilitator and less of a teacher. A major issue is trying to find that sense of community, which continues to be a concern for faculty as they contemplate how to provide a quality learning experience in an online setting." (p. 4-5)

The 2000 American Faculty Poll confirmed that one of the most important factors for faculty in their decision to pursue an academic career was the enjoyment of working with students. In a traditional classroom an instructor will use their understanding of the audience, participant reactions, body language, verbal response, eye contact, etc. to create an effective learning experience. With online education these observation techniques cannot be used.

As new technologies continue to emerge and students require more flexibility in class scheduling, institutions of higher education are striving to accommodate students. The prevalence of online distance education courses requires faculty to face new challenges and make new decisions in the areas of course management and design, delivery method, student communication media, creation of an engaging learning environment, assessment, and use of new technologies. The increase in online learning is requiring universities to change the way information is distributed to students; therefore, administrators need to be aware of the changes that must occur in the area of faculty
preparation. The faculty and departments need to be accountable for creating learning environments that are real and meaningful to all students (Kosak, Manning, Dobson, Rogerson, Cotnam, Colaric & McFadden, pg. 1 & 2).

Converting a traditional course to an online course is not simply a matter of typing lectures and posting them on the Internet. Instructors must discover new ways to engage the learners and encourage them to be active in the class instruction. In order to be successful as an online instructor, faculty need to have some understanding of pedagogy as it relates to distance instruction. According to online instructors need to know how to convert traditional lectures into interactive lessons that encourage students to be active participants. Faculty members need to be experts in their content areas and when working with online courses they need to attain a level of proficiency with the computer technologies. Online educators need to be competent in using technology as a means for effective instruction. Staff development is essential for the successful movement from the classroom to a distance learning environment (Kosak, Manning, Dobson, Rogerson, Cotnam, Colaric & McFadden, 2004 pg. 2 & 3).

In the paper, “Prepared to Teach Online? Perspectives of Faculty in the University of North Carolina System,” (2004) authors Kosak, Manning, Dobson, Rogerson, Cotnam, Colaric & McFadden studied whether university faculty in the University of North Carolina System receive sufficient training and support in developing an online distance education curriculum. They also focused on the types, and amount of training the faculty received at various institutions as well as their attitudes toward developing curriculum for online learning. The authors conducted an online survey was conducted to gather data from faculty of the schools and departments of education within
the University of North Carolina System who previously taught online courses. The survey addressed the experience of respondents, types of on and off campus training offered, topics offered in training, relevancy of offerings, whether or not training was required prior to course delivery, and requested ideas for staff development that were desired, but unavailable (pg. 1).

The survey consisted of 25 items in four major strands: demographic information; opportunity, location and types of training; online pedagogy and technical training and its timeliness and the overall evaluation of available training opportunities. Item types included multiple-choice, checklists, short text answer and five-point Likert scale questions. The sample population consisted of 125 faculty members from 12 universities. The results of the survey were of the 125 potential respondents, 83 participants completed the survey for a response rate of 66%. Of the 83 respondents almost three quarters were full professors, associate professors, or assistant professors. The remainder of respondents were self-classified as instructor, lecturer, or adjunct (p. 6).

The results of the study indicated that there was sufficient training for faculty to support the change to online learning. Respondents specified that most training was offered on-campus. The training was predominately related to pedagogical and technical areas, was viewed as relevant and accessible, and participation was voluntary or not required. Overall faculty were positive about the quality and quantity of training for course development and maintenance for online learning environments (p. 1). The only area of concern for faculty was the compensation for teaching an online course. Many professors were not receiving additional compensation for teaching an online course, even though an online course takes more preparation time. Financial differential is
necessary to attract and sustain effective online instructors as successful online faculty. Equate one online course as the equivalent to two ground-based courses in relation to resources needed to insure high quality and meaningful learning for students (p. 4).

The *Handbook of Online Learning* (2002) describes the ups and downs of online education. Resistance to online teaching has been attributed to psychological variables such as faculty lack of confidence, feelings of loss, and lack of awareness and training in new approaches. Others fear for the demise of the university as we know it. Successful operation of new technology can lead to greater sense of intelligence and efficacy, but failure can evoke feelings of stupidity and ineptitude. According to the authors what provides remarkable savings, efficiency and cost effective service can inefficiently consume huge amounts of time and attention. What has the potential for assimilating and joining people together on any number of topics and experiences can easily lead to the feeling of loneliness and isolation (p. 8 & 9). However, the authors also go into great detail of the positive outcome of online education between teacher and student. When designed properly, and given appropriate training and support, the shift moves from being fearful of the unknown to being excited about new ways of teaching and learning. Learners become more empowered and discover that the learning in an online course comes from other students and not solely from interaction with the instructor (pg. 182).

Author Thierry Volery describes instructor characteristics in his journal article, *Online Education: An exploratory study into success factors* (2001). He states:

“The instructor plays a central role in the effectiveness of online delivery. It is not the technology but the instructional implementation of the technology that determines the effects on learning. Three instructor characteristics
influence learning outcomes: attitudes toward technology, teaching style and control of the technology. Students attending a class with an instructor who has a positive attitude toward distributed learning and promotes the technology are likely to experience more positive learning outcomes. In a distributed learning environment, students often feel isolated since they do not have the classroom environment in which to interact with the instructor. To overcome this feeling, instructors can provide various forms of office hours and methods of contacts for the students. Most importantly, the instructor should exhibit interactive teaching styles, encouraging interaction between the students and with the instructor.” (p. 81)

A study conducted in 1998 by Martha Daugherty and Barbara L. Funke, *University Faculty and Student Perceptions of Web-Based Instruction*, included both university and faculty already involved with Web-based instruction. The authors examined perspectives of university faculty and students currently involved in one medium of distance education, web-based instruction. Students and faculty were surveyed on the advantages, disadvantages, and general effectiveness of using the Internet as a teaching and learning tool. The authors studied nineteen graduate students completing a master’s level program in education, thirty-six undergraduate students completing a traditional health science course on human sexuality, and seventy-six university faculty members.

The researchers used a structured survey instrument asking about the experiences both groups had with course activities. Survey questions were open-ended, so predetermined responses were not produced. Survey questions covered numerous topics and issues related to web-based course instruction and learning. Items ranged from the educational benefits of web-based instruction to attitudinal perspectives of incorporating technology into coursework. Student participants were asked to make comparisons
between traditional instruction and web-based instruction, to identify significant learning experiences and, to rate web-based instruction according to difficulty compared with traditional classroom activities.

Survey questions focused on the development and instruction of web-based coursework. Participants were asked to identify advantages for themselves and students, and to identify barriers or challenges associated with web-based instruction. In addition, faculty were asked to comment on their experiences in developing web-based instruction at their various institutions and to offer suggestions on making that experience easier for other interested faculty (p. 4).

Both students and faculty reported that web-based instruction can be an effective tool for the teaching and learning process. It has the potential to increase student motivation, and that it offers specific attributes such as student convenience not often considered in traditional course instruction. Other findings indicated that the student benefits included meaningful learning of technology through the integration of course content and computer applications, and an increased access to the most current and global content information available. Faculty reported a wide range of challenges in the development and delivery of web-based instruction. The most frequently identified barriers included lack of technical support, lack of software/adequate equipment and lack of faculty/administrative support. Respondents also identified as barriers the amount of preparation time required to create assignments, and students’ resistance. Both student and faculty emphasized the need for technical support and training as a necessity for successful web-based instruction (p. 9).
The authors concluded that faculty and student perceptions supported each other. Faculty recognized the benefits that students received, with most responses referring to the potential of the Internet as a strong source of information, a tool for incorporating current technology into instruction, and a vehicle for meeting the needs of nontraditional students. Students echoed the same benefits. Both populations acknowledged the need for adequate technological training and support as a prerequisite for successful web-based experiences. The commonality of perspectives among these two distinct groups demonstrates that the key stakeholders in higher education, the instructor and student, have similar interpretations of the qualities and characteristics related to web-based instruction. The findings suggest a strong bond of agreement in university communities on the potential of web-based instruction as a teaching and learning tool, thus increasing the likelihood of it playing an even more important role in higher education (p. 9).

Recent technological advances have created the possibility for new ways of learning and teaching. The Internet has captured the imagination of more people than any other computer innovation. Taking full advantage of the potential of the Internet requires university administrators, lecturers, and students to think about teaching and learning in new ways, to establish guidelines and benchmarks to ensure quality online delivery, and to identify best practice examples of online courses (Volery, 2001 p. 89).

“Online Education: An Exploratory Study Into Success Factors,” (2001) completed an exploratory study of a web-based distance education course at a major Australian University. Volery identified three critical success factors associated with teaching effectiveness in online delivery – technology (ease of access and navigation; interface design and level of interaction), the instructor (attitudes toward students;
instructor technical competence and classroom interaction), and the previous use of the technology from a student’s perspective (p. 89). The findings in this study indicate that the Internet and traditional classroom teaching methods are not mutually exclusive, but should be seen as an extra dimension in education, which can facilitate the lecturer’s task while benefiting the students as well. More importantly, the level of interaction between the students and the lecturer appears predominant in online delivery. It is evident, though, that lecturers and students alike need to upgrade their technological developments that are undoubtedly taking place (p. 89).

The importance given to the interaction between students and lecturer, both in cyberspace and in classroom settings, has further implications. The current interaction calls for a shift in the academic role from the intellect-on-stage toward a learning catalyst. The faculty role will change from being a content expert to a combination of content expert, learning process design expert, and process implantation manager. Faculty also will be motivators and mentors, interpreters, and expert learners - people who lead the learning process by breaking the trail and setting the right personal example (p. 89).

It is therefore the ability to catalyze students so they can discover their own learning that is crucial. The mentor who can communicate - that is, listen to students, understand them, not just talk to them as an “expert” - will thus have a role in the future. Lecturers need to help students realize that understanding about knowledge and beliefs are essential to the human growth and development. The authors conclude that technologies need not estrange educators from their humanity or the noble profession of educating competent citizens (p. 89).
CHAPTER III

RESEARCH DESIGN

Data Needed

The researcher used several main sources to collect secondary information for this study: online databases at Campbell Library at Rowan University, review of online education web-based instruction and distance education journals, Internet search engines, and several books related to the topic of online education. The research design was created with the purpose of identifying perceptions of Rowan University professors about online education and web-based instruction. The researcher attempted to determine Rowan University professors’ perceptions of online education by answering questions that are in the data categories of cognitive, attitudinal and behavioral. Participants answered cognitive questions such as:

- Based on my knowledge of on-line education programs offered at other institutions, I feel that Rowan University offers a competitive list of on-line course offerings.
- Based on your knowledge of the academic community in general, do you feel that the majority of college professors value a degree from an institution that offers a complete online education as much as they value the same degree earned at a traditional university/college?

The study included cognitive questions in order to gauge professors’ knowledge
of the current academic community as a whole, and where Rowan University stands in relation to other institutions. Participants responded to attitudinal questions such as:

- How do Rowan University professors view the shift from the academic classroom to online education and web-based instruction?
- Do Rowan University professors have favorable or unfavorable opinions about the quality of education of online courses?
- What suggestions, if any, do Rowan University professors have concerning implementing online education courses?

The study included attitudinal questions in order to determine the views held on various aspects of the online education paradigm in relation to Rowan University. Lastly, participants responded to behavior related questions such as:

- Have you had experience developing an online course at Rowan University?
- Have you had experience teaching an online course at Rowan University?
- If given the opportunity, I would teach online classes at Rowan University.

The aim of the behavioral set of questions was to identify the experiences and motivations that lead professors to teach or become involved with online education courses at Rowan University.

Sources of the Data

The author gathered data from studying Rowan University professors. The population included professors teaching courses at Rowan University during the 2009 spring and summer semesters.
Means of Acquiring Data

The data for this study was obtained by constructing an online survey using the website, www.surveymonkey.com, and face-to-face interviews. Due to the increasing prevalence of online education at colleges and universities the purpose of the survey was to learn of the perceptions of Rowan University professors and their views of online education.

The survey consisted of 24 questions for participants to answer. A variety of formats were used such as multiple choice and open-ended questions. The first two questions asked professors to reflect on how they personally feel about online education and the implementation of online education at Rowan University. Using a seven-point Likert scale (1 = Agree Very Strongly; 4 = Neutral; 7 = Disagree Very Strongly), these two questions sought to identify professors’ perceptions of their overall feeling toward online education and the execution of online education at Rowan University.

The next two questions on the survey asked professors how willing they would be to teach online education classes, and their feelings of where Rowan University stands in comparison to other university and colleges regarding online education using a seven-point Likert scale (1 = Agree Very Strongly; 4 = Neutral; 7 = Disagree Very Strongly). These two questions sought to identify the willingness of the professor to teach an online class and how the professor compares Rowan University’s online education program to that of other colleges and universities.

The next six questions on the survey consisted of multiple-choice responses. Additionally, respondents were asked to answer why they chose that response. These questions sought to learn if online courses should be available for a wider range of
programs; if online education could completely replace traditional classroom education; if online courses could increase enrollment; would online education enhance the education experience; and, if the participant had any experience with developing an online course at Rowan University.

The next three questions on the survey were statements that asked participants to use a five-point Likert scale to indicate their level of agreement or disagreement with the statements regarding online education (1 = Strongly Agree; 3 = Neutral; 5 = Strongly Disagree). These questions sought to study the attitudes of the participants regarding online education as an essential part of the overall university/college experience for students and the value of online-only universities/colleges degrees versus degrees from traditional universities/colleges.

The next five questions on the survey were structured, open ended questions. These questions allowed participants the freedom to respond, but at the same time confined their responses to a specific area or specific type. These questions asked participants to express how they felt about the quality of education in an on-line education course, the use of a hybrid model on the quality of education, any suggestions they would make to Rowan University in respect to on-line education courses, and the popularity of online classes for both professors and students at Rowan University. The last six questions of the survey sought to obtain demographic information about the participants.

Pre-testing was conducted in April 2009 with half of the Rowan University professors. These professors were emailed and mailed the survey using the website, www.surveymonkey.com and the Rowan University interoffice mail. From the pre-test,
the researcher received 33 online responses and 20 mail responses for a total of 53 responses. These completed surveys were used to make revisions for the final survey for distribution.

The sampling size for the survey included 201 Rowan University professors who were randomly selected from a Rowan University phone list of 402 professors. The list used to obtain this selection was the Rowan University phone directory. In May 2009 the 201 professors were emailed a cover letter that specified the purpose of the study, and deadline for completion along with the survey using the website www.surveymonkey.com. Additionally, six face-to-face interviews were conducted in May 2009. A total of 30 surveys were returned for a response rate of 15 percent.

**Analysis**

The researcher entered survey responses using the computer program, Statistical Package for the Social Sciences (SPSS) in order to create computer generated charts. Those results are reported in Chapter 4 of this study.
CHAPTER IV
RESULTS OF RESEARCH

The charts below show the results of the survey. The sampling size included 201 Rowan University professors. A total of 30 surveys were returned for a response rate of 15 percent.

The first four questions of the survey asked participants to choose on a Likert scale from one to seven, with one being “agree very strongly” and seven being “disagree very strongly.” These questions intended to identify professors’ perceptions of the variety of online course options offered to students, the implementation of online education courses at Rowan University, teaching online classes at Rowan University, and if Rowan University offers a competitive list of online course offerings as compared to other institutions.
Figure 1: Survey Question One

Question One: Rowan University offers students a wide variety of on-line course options. Of the 30 respondents, 40 percent chose the answers of disagree, disagree strongly, and disagree very strongly, indicating they disagreed.
Question Two: Rowan University has done a good job in implementing its online education courses. The results revealed division among the respondents’ opinions. Of the 30 respondents, 53.3 percent chose the answer of “Undecided”. However 23.3 percent chose the answers agree very strongly, agree strongly, and agree. The same percentage, 23.3 percent, selected answer choices disagree, disagree strongly, and disagree very strongly.
Question Three: If given the opportunity, I would teach online classes at Rowan University. Of the 30 respondents, 56.7 percent chose the answers of agree very strongly, agree strongly, and agree, indicating they agreed.
Question Four: Based on my knowledge of on-line education programs offered at other institutions, I feel that Rowan University offers a competitive list of on-line course offerings. Of the 30 respondents, 46.6 percent choose the answers disagree, disagree strongly, and disagree very strongly.

The next six questions of the survey asked participants multiple-choice responses. These questions also asked participants to explain why they felt this way. These questions intended to gain professor’s opinions about online education at Rowan University and online education in general. The last two questions asked participants if they have ever developed and taught an on-line course at Rowan University.

Figure 5: Survey Question Five

Question Five: In your opinion, should Rowan University offer a broader range of online courses than is currently available? Of the 30 respondents, 53.3 percent answered “yes” that Rowan University should offer a broader range of online courses. Some responses to this question were:

- To remain competitive with other institutions.
In order to stay competitive, we must provide this option for students.

To give students more options and to compete in the educational marketplace.

More opportunities for non-traditional students.

Depends on what kind of university we want to be. I value sitting with students in a traditional classroom and talking. The whole technology thing to me is overrated. However, we are a state university and I do think we have an obligation to bring higher education to South Jersey in meaningful ways, and perhaps some online programs could do that. Much more attention needs to be paid to quality.

Figure 6: Survey Question Six

Question Six: In your opinion, do you think that web-based instruction/online education could completely replace traditional classroom education? Of the 30 respondents, 90 percent answered “no” that web-based instruction/online education could not completely replace traditional classroom education. Some responses to this question were:
• Universities---especially in their treatment of the humanities --- should be a human institution: with real life contact between and among professors and students, to engage in real, ongoing debate and exploration if a topic, not the relentless tapping of keys and looking at a screen.

• Nothing can replace face-to-face interaction.

• There is no way to replace the personal dynamic. Most of us remember our teachers for what they taught us that was not specific content, but rather ways of learning and knowing. They inspired us personally.

• Some types of courses that need laboratory instruction require hands-on experience. In addition, some students learn better with the opportunity to interact face-to-face with professors.

• Quality may be an issue with online only education. Personal interactions are still vital in society and the workplace. Online is not reality and students must have sufficient personal interactions to fully develop intellectually and socially. Communication skills would be threatened with online only.

Figure 7: Survey Question Seven

Question Seven: In your opinion, do you think that increasing online course offerings will help increase enrollment at Rowan University? Of the 30 respondents, 83.3 percent
answered “yes” that online course offerings would help increase enrollment at Rowan University. Some responses were:

- Students want convenience.
- On-line courses would probably be available to a much wider audience.
- Yes, I think there is a market for online courses and Rowan should tap into it for some subjects.
- I think many adults and even some traditional-age college students do have complicated lives and wish to pursue their education in nontraditional ways.
- It would expand the geographic extent of our potential student base.

Figure 8: Survey Question Eight

Question Eight: In your opinion, do you think that increasing online class offerings will enhance the education experience at Rowan University? The results revealed division among the respondents’ opinions. Of the 30 respondents, 40 percent answered, “yes”. 26.7 percent answered, “no” and 33.3 percent answered “not sure”. Some responses were:
• This requires more training for faculty to offer the courses which requires more time, which faculty do not have with the current demands for teaching, scholarship and service.

• I don’t think learning is enhanced via on-line classes; but I do think it allows us to reach a wider market.

• On-line learning offers some privacy and anonymity that can foster critical exchanges among students and between faculty and students. Links to other institutions, courses and students gives students the opportunity to collaborate with people who they would otherwise never have the chance to interact with.

• There is real value in face-to-face experiences with faculty. Online is a practical option when this is not possible, but not the preference.

• More students have access. A small mixture of online classes may facilitate graduation rates if it provides greater flexibility for students to complete all required classes.

Figure 9: Survey Question Nine

Question Nine: Have you had experience developing an online course at Rowan University?
Of the 30 respondents, 70 percent answered, “no” to having experience developing an online course at Rowan University.

Figure 10: Survey Question Ten

Of the 30 respondents, 80 percent answered, “no” to having taught an online course at Rowan University.

Question Ten: Have you had experience teaching an online course at Rowan University?

Of the 30 respondents, 80 percent answered, “no” to having taught an online course at Rowan University.

The next three questions of the survey asked participants to rate descriptors choose on a Likert scale from one to five with one being “strongly agree” and five being “strongly disagree.” These questions intended to identify professors’ perceptions of online education and if it plays an essential part of the overall university/college experience and the value of a degree from a completely online institution versus a degree earned at a traditional university/college.
Figure 11: Survey Question Eleven

Question Eleven: Online education should be an essential part of the overall university/college experience. Of the 30 respondents, 40 percent neither agreed nor disagreed with this statement. Figure 11 denotes that the majority of the respondents designated a neutral viewpoint regarding online education as being an essential part of overall university/college experience.
Figure 12: Survey Question Twelve

Question Twelve: Based on your experience, do you value a degree from an institution that offers complete online education as much as you value the same degree earned at a traditional university/college? Of the 30 respondents, 56.7 percent strongly disagreed with the statement.
Figure 13: Survey Question Thirteen

Question Thirteen: Based on your experience and knowledge of the academic community in general, do you feel that the majority of college professors value a degree from an institution that offers a complete online education as much as they value the same degree earned at a traditional university/college? Of the 30 respondents, 90 percent disagreed with the statement.

The next five questions of the survey were structured open-ended and asked participants to express how they felt about the quality of education in an on-line education course, the use of a hybrid model on the quality of education, any suggestions they would make to Rowan University in respect to on-line education courses and the popularity of online classes for both professors and students at Rowan University.

Question Fourteen: The quality of education is BETTER/WORSE/SAME in an on-line education course. Of the 30 respondents, the majority of the respondents felt the quality would be worse in an on-line education course. Some of the responses from the respondents are as follows:
• Worse, because the quality of interaction is substantially different and the nonverbal components and spontaneity are removed from the equation.

• If one is trying to achieve what is achieved in a traditional classroom, then it is worse. Online education has its own strengths, but imitating traditional educational experiences is not one of them.

• Worse. Online students typically are juggling other life responsibilities and do not expend the same time on studies as traditional students.

Also, for question fourteen a significant number of responses gave the answer that it depends, instead of better, worse or same. Respondents felt that quality of education in an on-line education course would depend on the course, professor, subject matter and the involvement of the student.

Question Fifteen: The use of a hybrid model-some classes on-line and some classes in a traditional classroom setting – would DIMINISH/IMPROVE/HAVE NO IMPACT on the quality of education. Of the 30 respondents, the majority felt that the use of a hybrid model would improve the quality of education. Some of the responses are as follows:

• A hybrid system would improve education. It is the best of both worlds.

• I feel that hybrid courses can be helpful and offer options that may be economically advantageous.

• For some classes, it would improve the quality of education where the learning goals could be best achieved through the hybrid method. Chat rooms, discussion groups, and online sharing of video and/or text can easily enhance/improve the quality of the educational experience. Thus, hybrid models could also enhance the educational experience where the goals and outcomes of the course support the methodology. The method of delivery should NOT determine learning outcomes, learning objectives should lead to desired outcomes and then the best methodology should be chosen.

• Improve - gives students a chance to engage in an experience involving on-line technology.
• I think it would improve if it is done right. Developing a mix is moving in the right direction.

Question Sixteen: What suggestions, if any, would you make to Rowan University with respect to on-line education courses? There were many different suggestions. Some of the suggestions from the respondents are as follows:

• Make professors more aware of what is available and how it fits into existing academic programming.

• Go slowly and do a good job. Do not simply make training available, but make time for instructors to include the training in their already tight schedules. Don't just plop the current course syllabus on to the computer and call it an online course. Integrate the multiple functions available via computer to increase the skills and abilities of students to direct their own learning.

• Emphasize hybrids rather than all online programs and allow departments more independence in program development.

• Continuous evaluation and improvement of the delivery systems, learning goals, learning outcomes, and markets served by the new methodologies.

• We should continue to be leaders and not followers in the area on of on-line education.

Question Seventeen: In your opinion, do you think online classes would be popular among professors at Rowan University? Why or Why not? Of the 30 respondents, the majority felt that online classes would not be popular among professors at Rowan University. However, a considerable number of respondents answered that it would depend on the instructor, course, and material. These respondents also felt that age played a part on whether an instructor would be interested in teaching the course and actually teach the course. Some of the responses from the respondents are as follows:
• The professors don’t have the time to develop these courses; there are way too many demands on their time now.

• No. Having informally polled my graduated students, they overwhelmingly have stated that they came to Rowan because they want the interaction between themselves and professors, and among their colleagues in the program.

• Probably not, it would require a major change in the teaching philosophy and many people dislike that. Unless there is a substantial compensation associated with these online courses, I doubt a lot of faculty will be willing to participate.

• Unpopular. They tend to be very labor intensive and lack the personal dimensions of connection associated with traditional modes of instruction. In sum, there is an aspect of dehumanization when teaching and learning are disembodied.

• No. I think most professors want to interact directly with their students to foster their full development academically.

Question Eighteen: In your opinion, do you think online classes would be popular among students at Rowan University? Why or Why not? Of the 30 respondents, the majority felt that online classes would be popular among students. Some of the responses are as follows:

• Yes. Students like doing things at a time of their choosing.

• Popular because these courses can fix into busy schedules for non-traditional learners.

• Probably yes, because they provide more flexibility and perhaps because the students may be perceived that it will be easier to get a good grade in online courses.

• I think more students than professors would like them. They would like the convenience and the not having to show up to class.

• Yes. They like working when they want, where they want and how they want. Some do not like class attendance interfering with their personal lives. Perception that this is an easier route (at least time wise).
The last six questions of the survey sought demographic information about the respondents, such as their gender, age, academic rank, how many years teaching in higher education, how many years teaching at Rowan and what Rowan college did they belong to.

Figure 14: Survey Question Nineteen

Question Nineteen: What is your gender? Of the 30 respondents, 60 percent were male and 40 percent were female.
Question Twenty: What is your age range? Of the 30 respondents, 60 percent were in the age range of 50-64, 30 percent were in the age range of 35-49 and 10 percent were in the age range of over 64.
Question Twenty-One: What is your academic rank? Of the 30 respondents, 36.7 percent hold the position of Associate Professor, 33.3 percent hold the position of Assistant Professor and 30 percent hold the position of Professor.

![Figure 17: Survey Question Twenty-Two](image)

Question Twenty-Two: How many years have you been teaching in higher education? Of the 30 respondents, 83.3 percent have been teaching ten years or more in higher education and 16.7 percent have been teaching in higher education between 6-9 years.
Question Twenty-Three: How many years have you been teaching at Rowan University?

Of the 30 respondents, 66.7 percent have been teaching 10 years or more at Rowan University, 26.7 percent have been teaching at Rowan University between 6-9 years and 6.7 percent have been teaching at Rowan University for five years or less.
Question Twenty-Four: What College do you belong to? Of the 30 respondents, 50 percent belonged to the College of Liberal Arts, 20 percent belonged to the College of Education, 16.7 percent belonged to the College of Engineering, 10 percent belonged to the College of Communication, 3.3 percent belonged to the College of Business and both the College of Fine and Performing Arts and the College of Continuing and Professional Education had 0 percent.

Along with the survey, 6 anonymous interviews were conducted with Rowan University professors. Interviews were conducted with 6 professors, three male and three female, from the colleges of: Business, Communication, Education, Engineering, Fine and Performing Arts and Liberal Arts and Sciences. Before the interview, professors were told of the purpose and the use of the study and were informed by the researcher that responses would be used for the purpose of research only and the professors themselves
would remain anonymous. For the interview summary respondent 1 is a Professor in the College of Business. Respondent 2 is an Associate Professor in the College of Communication. Respondent 3 is an Assistant Professor in the College of Education. Respondent 4 is an Assistant Professor in the College of Engineering. Respondent 5 is an Associate Professor in the College of Liberal Arts and Sciences. Respondent 6 is a Professor in the College of Fine and Performing Arts. The researcher will refer to the professors as respondents 1, 2, 3 … etc. along with their department. The professors were asked 14 questions regarding online education and Rowan University.

Question One: Do you agree or disagree with online education at Rowan University?

- Respondent 1 disagreed with online education at Rowan University.
- Respondents 2, 3, 4, 5 and 6 all agreed with online education at Rowan University.

Question Two: Do you agree or disagree with the way Rowan University has implemented online education?

- Respondents 1 and 3 disagreed with the way Rowan University has implemented online education.
- Respondents 2 and 5 agreed with the way Rowan University has implemented online education.
- Respondents 4 and 6 were undecided about the implementation of online education at Rowan University.

Question Three: Would you teach an online class at Rowan University yes or no?

- Respondents 1, 4 and 6 would not teach an online class.
- Respondents 2, 3 and 5 would teach an online class.

Question Four: Do you agree or disagree that Rowan University is behind other institutions with respect to online courses?
• Respondent 1 disagreed that Rowan University is behind other institutions with respect to online courses.

• Respondent 4 was undecided about Rowan University’s position in comparison with other institutions and online courses.

• Respondents 2, 3, 5 and 6 all agreed that Rowan University is behind other institutions with respect to online courses.

Question Five: Should online courses be available at Rowan University for a wider ranger of programs, yes or no and why?

• Respondent 1 felt that a wider range of programs should not be made available because faculty-student face-to-face interaction is very important in education.

• Respondent 3 that a wider range of programs should be made available because online environments are what many people are searching for. To be competitive, we need to be providing our services online as well as in person.

• Respondents 2, 4, 5, 6 all were unsure if a wider range of programs should be made available. Respondent 5 felt this way because an institution can't simply jump into online course delivery. Because our hallmark at Rowan is an educational experience that involves a personal relationship between professor and student, and small class sizes, online education should be incorporated only to a certain extent, and only in pedagogically appropriate courses.

Question Six: Can web-based instruction/online education completely replace teachers and classrooms, yes or no and why?

• Respondents 1, 2, 3, 4, 5 and 6 all felt that web-based instruction/online education could not completely replace teachers and classrooms.

• Respondent 1 said, “Face-to-face interaction was very important.”

• Respondent 2 said, “Web-based instruction still requires a teacher. And, a classroom is defined wherever people gather to learn - that can easily be a virtual community. Finally, web-based education expands the market - it does not do away with other means of delivery.”
• Respondent 3 said, “There is a certain element of meaning and understanding that is communicated through in-person dialogue and exchange. This is lost in just the written word and in the asynchronous environment. You cannot truly replace the real deal with the virtual deal. However, there is still much value to the exchanges and dialogues that can take place online. I have witnessed that, myself, during my online courses.”

• Respondent 5 said, “The personal interaction is a crucial component of teaching.”

• Respondent 6 said, “Not for studio classes where the interaction and "feeding off" of students and teachers on one another is essential. Wouldn't work for scene work in acting classes!”

Question Seven: Will the option to take online classes boost enrollment, yes or no and why?

• Respondents 1, 2, 3, 4 and 6 all agreed that online classes would boost enrollment at Rowan University. Respondent 1 said, “It will help enrollment for those students who are looking for easier degrees.” Respondent 3 said, “Students who live a distance away from campus would likely enroll in a course that would not require their presence each week on campus. Also, online classes could provide a vehicle for some who would otherwise not enroll.”

• Respondent 5 was not sure if online classes would help boost enrollment. Respondent 5 said, “Too many other schools offer online courses.”

Question Eight: Have you had experience teaching/developing an online course at Rowan University, yes or no?

• Respondents 1, 2, 4, 5 and 6 all answered, “no” that they have not had experience teaching/developing an online course at Rowan University.

• Respondent 3 was the only one to answer, “yes” to having experience teaching/developing an online course at Rowan University.
Question Nine: Do you agree or disagree that online education should be an essential part of the overall university/college experience?

- Respondents 1, 2, 3, 4 and 6 all disagreed that online should not be an essential part of the overall university/college experience.
- Respondent 5 did not agree nor disagree to this question.

Question Ten: Do you agree or disagree that degrees earned from an online-only university/college are the valued the same as degrees earned at a traditional university/college?

- Respondents 1, 2, 3, 4, 5 and 6 all disagreed that degrees earned from an online – only university/college are not valued you the same as degrees earned at a traditional university/college.

Question Eleven: Do you agree or disagree that degrees issued from online programs offered through a traditional university/college are valued the same as degrees earned through traditional classroom programs at a traditional university/college?

- Respondents 1 and 6 both disagreed that degrees issued from online programs offered through a traditional university/college are not valued the same as degrees earned through traditional classroom programs at a traditional university/college.
- Respondents 3, 4, 5 all answered that they neither agreed nor disagreed with this question.
- Respondent 2 agreed that degrees issued from online programs offered through a traditional university/college are valued the same as degrees earned through traditional classroom programs at a traditional university/college.
Question Twelve: Do you agree or disagree that students can learn the same material from an online class as they would in a traditional classroom?

- Respondents 1, 2, 5 and 6 all disagreed that students can not learn the same material from an online class as they would in a traditional classroom.
- Respondent 3 did not agree nor disagree with this question.
- Respondent 4 agreed that students can learn the same material in an online class as they would in a traditional classroom.

Question Thirteen: Do you think online classes would be popular among Rowan University professors. If yes, why? And if no, why not?

- Respondent 1 said, “Not sure, but I think it would be most popular among the adjunct professors.”
- Respondent 2 said, “Maybe. Sometimes they take a very long time to develop and implement, and there is no compensation for this work. If the course required little development, I can see them being more popular.”
- Respondent 3 said, “No, simply because they're not for everyone and anyone.”
- Respondent 4 said, “Maybe.”
- Respondent 5 said, “This depends on the professor--some professors prefer online education (they enjoy working with the latest technology, they want maximum flexibility in time and/or location). Other professors prefer face-to-face education because their teaching style, or the nature of their discipline, or both, will work better with traditional teaching formats. "Popular" is not the same as "better," and in education, "one size fits all" will not work.”
- Respondent 6 said, “Not sure. Could have very large sections and there is no established way to reward the extra work involved in handling 1000 students instead of 30.”
Question Fourteen: Do you think online classes would be popular among students at Rowan University? If yes, why? And if no, why not?

- Respondent 1 said, “It would be unpopular among students who want a real education.”

- Respondent 2 said, “It is a question of preference. For some - I have a student who is currently serving in the military overseas for example - it is the only way they can have access to these services. Others just don't respond to learning using this delivery technology.”

- Respondent 3 said, “Yes, the students will like the courses but the online courses will lack the personal touch that the students need in this competitive markets.”

- Respondent 4 said, “Yes - they set their own schedule.”

- Respondent 5 said, “Online courses will be popular among students who want more flexibility and/or who are more comfortable working by themselves or in a small group rather than in a traditional classroom. Many students do not realize, though, the importance of self-discipline, time management, and organization in terms of online success. An online course sounds easy but typically is not.”

- Respondent 6 said, “Yes because they can do the work when they have time.”

Summary of Results

Online Education and Students

The survey results revealed that the majority, 57 percent of the participants polled felt that online classes would be popular among students. This was most commonly attributed to reasons such as convenience and flexibility (question 18). There seemed to be division among respondents as to online education being an essential part of the college experience or whether increasing online classes would enhance the education
experience at Rowan University (questions 8 and 11). However, a wide majority, 83.3 percent of the professors polled said, “Yes” increasing online class offerings will help increase enrollment at Rowan University (question 7).

Current Online Offerings

Respondents demonstrated a consistent trend in opinion wherein 40 percent believe there is not a wide variety of on-line course options (question 1), also 53.3 percent agreed that Rowan University should offer a broader range of courses then is currently available (question 5). Additionally, 46.6 percent a plurality of respondents do not believe that Rowan University offers a competitive list of on-line course offerings (question 4).

Online Education versus Traditional Classroom Education

The data displayed a strong trend in the responses with 90 percent of participants indicating that they believed that web-based instruction/online education could not replace traditional classroom education (question 6). This belief could be caused by the indication that 37 percent of the respondents feel that an on-line education course would worsen the quality of education (question 14). These opinions on the quality of online education are reflected in the feedback where 83.4 percent said they do not value a degree from an online university as much as a degree earned from a traditional university (question 12). Additionally, these professors overwhelmingly stated, 90 percent, they believe the academic community as a whole does not value a degree from an online university as much as a degree earned from a traditional university (question 13). However, a plurality of the professors, 47 percent, agreed that the use of a hybrid model would improve the quality of education at Rowan University (question 15).
Implementing Online Classes

When asked if Rowan University has done a good job in implementing its online education courses 53.3 percent chose, “Undecided” (question 2). Subsequently many professors offered suggestions indicating that the University should proceed carefully with its implementation of online courses (question 16). Many participants demonstrated a lack of experience with online education as 70 percent reported having never developed an online course and 80 percent having never taught an online course at Rowan University (questions 9 and 10). 47 percent of participants indicated they believe more online classes would not be popular among professors at Rowan University, citing reasons such as: time, compensation, lack of personal interaction with students and too much work (question 17). On the contrary, of the professors polled, 56.7 percent of them agreed that they, themselves would teach an online course (question 3).

Conclusion

Overall, the survey results offered specific data, and generally demonstrated a favorable view of the potential for the further development of Rowan University’s online presence. To a lesser extent it demonstrated unfavorable views of the current status of online education at Rowan University. The above results clearly indicate that Rowan University Professors have diverse opinions about online education, but also recognize the value in this asset to higher education.
CHAPTER V

INTERPRETATIONS AND SUGGESTIONS

The secondary research showed the increasing popularity of online education among colleges/universities and students. Many colleges and universities have either just started developing their online course offerings or have already been in the market for quite some time. Rowan University has just begun to develop its online course offerings and programs; thus, placing them in competition with many other colleges and universities.

The above results clearly indicate that Rowan University professors have diverse opinions about online education, but also recognize the value in this asset to higher education. Overall, participants demonstrated a favorable outlook on the possibilities of online education at Rowan University. For example, 56.7 percent stated they would teach an online class. Eighty-three point three percent believe online class offerings would increase enrollment. Additionally, 47 percent said they believed that using a hybrid model would improve the quality of education, citing reasons such as: are the best of both worlds, economically advantageous, engage students in an experience involving online technology, and greater flexibility to take and offer courses.

One common impediment to increasing online options for students is the assumption that professors are reluctant to teach them. The study showed that 47 percent of participants indicated they believe more online classes would not be popular among professors at Rowan University, but of the professors polled, 56.7 percent of them agreed
that they, themselves would teach an online course. This suggests that there is an inflated notion of professors’ reluctance to teach online classes because, when asked to self-report, the majority of professors said that they are willing to teach online classes.

Regardless of the increasing popularity of online universities, 83.4 percent of Rowan University professors said they do not value a degree from an online university as much as a degree earned from a traditional university. Additionally, these professors overwhelmingly stated (90 percent) that they believe the academic community as a whole does not value a degree from an online university as much as a degree earned from a traditional university. Many of the respondents feel that an on-line education course is of lesser quality than traditional education. However, a plurality of the professors, 47 percent, agreed that the use of a hybrid model would improve the quality of education at Rowan University. Therefore, respondents indicated that if the hybrid model can enable more students to complete degrees from a traditional educational institution, like Rowan University, that this would be beneficial to both the university and the community.

There were some caveats to this study, and ways in which this can be improved. Primarily, the response rate from the sample. For this study, the sample size was limited largely by the unwillingness of the population to participate. In addition to an unfavorable response rate, there were multiple responses indicating refusal to participate. A larger sample size would ensure a greater confidence level. Also, time constraints were an issue since surveys were distributed at the end of the Spring 2009 semester many professors were not readily available to participate in the study. Regarding topics connected to the education field, such as online education, those employed in the industry, such as college professors, will have opinions that are inherently biased toward job-preservation. So,
perhaps given more participation for a larger sample size and the inclusion of more faculty such as administration, adjunct professors and educators in the College of Professional and Continuing Education, a more full and accurate picture of the potential of the expansion of Rowan University’s online presence could be established.
REFERENCES


Bower, Beverly L.. "Distance Education: Facing the Faculty Challenge." Department of Educational Leadership Florida State University. 2 Feb. 2009 <http://www.westga.edu/~distance/ojdla/summer42/bower42.html>.


Johnson, Scott D., Steven R. Aragon, Najmuddin Shaik, and Nilda Palma-Rivas.


APPENDIX
Sample Questionnaire

1. Using the scale below each descriptor please rate your feelings with 1 being Agree Very Strongly to 7 being Disagree Very Strongly.

Rowan University offers students a wide variety of on-line course options.

☐ Agree Very Strongly
☐ Agree Strongly
☐ Agree
☐ Undecided (No Opinion)
☐ Disagree
☐ Disagree Strongly
☐ Disagree Very Strongly

2. Rowan University has done a good job in implementing its online education courses.

☐ Agree Very Strongly
☐ Agree Strongly
☐ Agree
☐ Undecided (No Opinion)
☐ Disagree
☐ Disagree Strongly
☐ Disagree Very Strongly
3. If given the opportunity, I would teach online classes at Rowan University.

☐ Agree Very Strongly
☐ Agree Strongly
☐ Agree
☐ Undecided (No Opinion)
☐ Disagree
☐ Disagree Strongly
☐ Disagree Very Strongly

4. Based on my knowledge of on-line education programs offered at other institutions, I feel that Rowan University offers a competitive list of on-line course offerings.

☐ Agree Very Strongly
☐ Agree Strongly
☐ Agree
☐ Undecided (No Opinion)
☐ Disagree
☐ Disagree Strongly
☐ Disagree Very Strongly

5. In your opinion, should Rowan University offer a broader range of online courses than is currently available?

☐ Yes
☐ No
☐ Not Sure

Please explain why you feel this way.

6. In your opinion, do you think that web-based instruction/online education could completely replace traditional classroom education?

☐ Yes
☐ No
☐ Not Sure

Please explain why you feel this way.
7. In your opinion, do you think that increasing online class offerings will help increase enrollment at Rowan University?

☐ Yes  
☐ No  
☐ Not Sure  
Please explain why you feel this way.

8. In your opinion, do you think that increasing online class offerings will enhance the education experience at Rowan University?

☐ Yes  
☐ No  
☐ Not Sure  
Please explain why you feel this way.

9. Have you had experience developing an online course at Rowan University?

☐ Yes  
☐ No  

10. Have you had experience teaching an online course at Rowan University?

☐ Yes  
☐ No  

11. Please rate the following descriptors with 1 being Strongly Agree to 5 being Strongly Disagree.

   Online education should be an essential part of the overall university/college experience.

☐ Strongly Agree  
☐ Agree  
☐ Neither Agree nor Disagree  
☐ Disagree  
☐ Strongly Disagree
12. Based on your experience, do you value a degree from an institution that offers a complete online education as much as you value the same degree earned at a traditional university/college?

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

13. Based on your experience and knowledge of the academic community in general, do you feel that the majority of college professors value a degree from an institution that offers a complete online education as much as they value the same degree earned at a traditional university/college?

- [ ] Strongly Agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

14. Please respond briefly to the following.

The quality of education is BETTER/ WORSE/SAME in an on-line education course.

15. The use of a hybrid model—some classes on-line and some classes in a traditional classroom setting—would DIMINISH/IMPROVE/HAVE NO IMPACT on the quality of education.

16. What suggestions, if any, would you make to Rowan University with respect to on-line education courses?

17. In your opinion, do you think online classes would be popular among professors at Rowan University? Why or Why not?
18. In your opinion, do you think online classes would be popular among students at Rowan University? Why or Why not?

19. What is your gender?
   - Female
   - Male

20. What is your age range?
   - under 34
   - 35-49
   - 50-64
   - over 64

21. What is your academic rank?
   - Assistant Professor
   - Associate Professor
   - Professor

22. How many years have you been teaching in higher education?
   - 5 years or less
   - 6-9 years
   - 10 years or more

23. How many years have you been teaching at Rowan University?
   - 5 years or less
   - 6-9 years
   - 10 years or more
24. What Rowan College do you belong to?

- College of Business
- College of Communication
- College of Education
- College of Engineering
- College of Fine and Performing Arts
- College of Liberal Arts and Sciences
- College of Continuing and Professional Education