Determining the Quality and Impact of an E-Mentoring Model on At-Risk Youth

by

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Chapter 1

Introduction

The problem of students leaving school before graduation is a national crisis. The National Center for Education Statistics reported that in 2005 approximately 3.5 million 16- through 24-year-olds were not enrolled in high school and had not earned a high school diploma or alternative credential such as a GED. These individuals accounted for 9.4 percent of the 36.8 million 16-through 24-year-olds in the United States in 2005. Research reveals that although the dropout rate has declined between 1972 (14.6%) and 2005 (9.4%) (NCES, 2007), leaving school without a diploma continues to pose a serious problem to the social and economic health of the country as well as to the individual dropout (Lehr, 2004).

Parents, high school counselors, teachers, and administrators, along with employers and the business community, worry about the fate of high school dropouts. As the United States moves towards a higher-skilled labor force, high school dropouts will have a more difficult time surviving economically (Beatty, Neisser, Trent, & Heubert, 2001; Hull & Grevelle, 1998; Swanson, 2007). Those who drop out of high school can expect to earn considerably less money, expect to experience difficulties with mental and physical health, and will most likely have less than adequate academic skills than high school graduates (Bridgeland, Dilulio, & Morison, 2006; Catterall, 1985; Edmondson & White, 1998; Harlow, 2003; Rumberger, 1987). For example, in 2005 the unemployment rate for dropouts was 32.9%. Further, the earnings of a high school dropout over a 40 year period is approximately $350,000 less than those of a high school graduate over a lifetime of working (Spotlight on Statistics, 2007). Dropping out not only makes an impact on the readiness of the workforce in the 21st century global economy, but it is also intertwined with other issues impacting America’s social structure. Poverty, teen pregnancy,
child abuse, drug abuse, and criminal activity are often the result of a lack of education and training necessary to succeed in today’s workplace.

Until the beginning of the 20th century, dropping out of high school was not perceived as a problem in society because very few students enrolled in high school in the first place. As the United States moved from a rural economy to an urban one, more and more students enrolled in and graduated from high school. However, there were plenty of jobs still available for adults without high school diplomas. Today, this is simply not the case. American competitiveness and worker prosperity are tied tightly to the education attainment and skill development of the workforce (Swanson, 2007; U.S. Department of Commerce, 2004).

Only recently have educators begun placing greater attention on dropout prevention in this country (Boniilla, as cited in Lunenburg, 2000; Hammond, Smink, & Drew, 2007). In 1986, Florida passed the Dropout Prevention Act which authorized and encouraged district school boards to establish comprehensive dropout prevention programs. Since that time, various programs and strategies have been developed to help keep students in school including modifying the instructional environment, strengthening school membership, developing relationships with students, counseling, and mentoring (Bransford, Brown, & Cocking, 2000; Lunenburg & Irby, 1999; Stanard, 2003). Unfortunately, many of these programs rarely constitute a major effort to hold youth in school. They are often too small, poorly funded, and isolated to really make a dent in the dropout problem (Dorn, 1996).

During the last decade and a half, mentoring has been rapidly gaining momentum in the school environment. Approximately five million youth are involved in school and community-based mentoring programs nationwide (McLearn, Colasanto, Schoen, & Shapiro, 1999). Mentoring can be found in programs that address the needs of youth at risk for educational
failure, teen pregnancy, delinquency and substance abuse. Mentoring can also be found in career exploration and preparation programs both at the secondary and postsecondary levels. Mentoring is often part of a dropout prevention program.

According to the National Mentoring Partnership (2007), approximately 15 million young Americans are waiting to be matched with a mentor. Scarcity of resources, lack of time, and a limited number of available adults have hindered the successful implementation of many mentoring programs. Although the research indicates mentoring is an extremely effective way to promote student success and decrease the high school dropout rate, like many other intervention strategies, mentoring has not become a major component in the American education model.

One reason mentoring has not been fully implemented throughout the education world is that the demand for mentors far outweighs the available supply. Volunteers are scarce. People who otherwise might wish to become mentors are leading very busy and hectic lives (Furano, Roaf, Styles, & Branch, 1993). Many people who might make excellent role models for at-risk youth feel they are unable to commit the required time necessary. Retirees might have time to serve as mentors but often lack the ability to do so due to financial or transportation issues. College students might have the interest in the students but might find it difficult to make a long-term relationship considered so important. Some potential mentors might be afraid to go into the neighborhoods that are most in need of positive role models for youth. Practitioners have begun to search for alternative forms of mentoring. One of these alternatives is e-mentoring.

E-mentoring is the telecommunications version of mentoring. Using the Internet, mentors are connected to their mentees. Many mentors cannot or do not have the time or ability to go to a classroom, but they can become involved with students via the Internet. Usually, the interaction
between the mentor and mentee occurs via e-mail, but it could also entail instant messaging, audio and video conferencing, and online discussion boards both synchronously and asynchronously (Guy, 2002; Single & Muller, 1999). Currently, there is a great deal of excitement about e-mentoring, and as access to technology and the Internet has become more common in homes and schools across the country, it has become easier to develop e-mentoring programs. Some of the programs focus on career or school outcomes, while others focus on much broader developmental goals.

Currently, the most common form of e-mentoring is the ask-an-expert model. This model of connecting subject matter experts with students who are studying or researching a particular topic is easier to integrate into the classroom than more traditional mentoring programs. Two successful e-mentoring ask-an-expert projects currently underway in the United States are the International Telementor Project (ITP) and the Electronic Emissary Project (EEP). ITP creates matches between industry professionals and students. Since 1995, over 28,000 students have been served throughout nine countries (Lewis, 2005). EEP, which has been in existence since 1993, is designed to match students with subject matter experts from around the world via e-mail to provide assistance in curriculum-based projects. To date, over 400 teams of students, teachers, facilitators, and subject matter experts have participated in an EEP project. Other e-models are just emerging.

The literature is full of numerous mentoring projects that have been studied and researched, but there is very little theoretical perspective for mentoring. Bozeman & Feeney (2007) suggest that there has been much emphasis placed on the nature of effective mentoring, the benefits of mentoring, or the impact of mentoring on a specific population, and that there has been too little attention to the core concepts and theory.
In addition, the descriptions of mentoring programs are so diverse and the empirical studies so broad that the cumulative knowledge gained through the research is often inconsistent and sometimes opposing. Another problem is the lack of a common operational definition of mentoring (Bozeman & Feeney, 2007; Healy & Welchert, 1990; Jacobi, 1991). For the purposes of this study, the definition of mentoring was adapted from the National Mentoring Partnership (2008) and reads as follows: “Mentoring is a structured and trusting relationship that brings young people together with caring individuals who offer guidance, support and encouragement aimed at developing the competence and character of the mentee.

Statement of the Problem

There were two problems that were investigated in this dissertation study. Since e-mentoring is relatively new, there are very few studies that explore the impact of an e-mentoring program on both the academic and psychological outcomes of its participants. There is also little research on the quality of implementing, or what we will call the working quality, of an e-mentoring model. This study addressed both. First, the study will helped determine whether e-mentoring had an academic and psychological impact on high school students who were at-risk of dropping out of school. Second, the working quality of the e-mentoring model was addressed. By using a design experiment methodology during the course of the study and examining the quality of each component of the e-mentoring model as it is being implemented, problems may be identified and possibly corrected or improved upon as they arise during each component of the e-mentoring program.

Purpose of the Study

The purpose of this study was twofold. The first purpose was to determine the impact of an e-mentoring program on at-risk students’ attendance, achievement, self-esteem, and career
indecision. The students participating in the study were enrolled in the GED Exit Option program during the 2006-2007 school year.

Second, the study examined the working quality of each component of the structured e-mentoring program model and evaluated each as it was being implemented in order to determine the implication for design changes needed to improve the model while the program was underway and in future programs.

Research Questions

Three research questions were posed:

1. What is the impact of the structured e-mentoring model on at-risk students’ self-esteem, career indecision, academic achievement, and attendance?

2. What is the working quality of each of the design components of the structured e-mentoring model?

3. What are the implications for design changes needed to improve the model during the study and in subsequent studies?

Definition of Terms

For the purpose of this study, the definitions of terms are as follows:

At risk students – Students who are in danger of dropping out of school before graduation; they do not have enough credits, or the required 2.0 grade point average, or have not yet passed the Florida Comprehensive Achievement Test (FCAT), or have too many absences.

Career indecision – The degree of certainty a person feels about his/her decision about a college major and/or a career.

E-Mentoring – The telecommunications version of mentoring. Using the Internet, mentors are connected to their mentees.
**GED Exit Option** – An option that states have to administer the GED Test to students currently enrolled in high schools in order to avoid the inducement of students to leave school before graduating (GED Exit Option Model Procedures Manual, 2003).

*Mentee* – The student being mentored or guided by the mentor.

*Mentor* – An individual who is a trusted guide; an adult who develops a relationship with a younger person in order to teach, lead, or coach.

*Mentoring* – Generally, a one-on-one relationship between an adult and youth that continues over time and is focused on the youth’s development.

*Self-esteem* – Self-worth; the value someone gives to his or her life and accomplishments.

*Working quality* – Quality of implementation; the quality of how the program actually works.

**Assumptions**

The researcher assumed that there was uniformity in understanding and implementing the mentoring program by the mentors, mentees, and teachers. It was assumed that all the participants responded honestly on the survey instruments that they are asked to complete. It was also assumed that the mentors and mentees were able to develop a relationship during the time period of five months. Three teachers and six classes participated. The curriculum for the GED Exit Option program is standard, and it was assumed that all students received comparable instruction. It was also assumed that all students were able to utilize the hardware and software necessary to communicate online.

**Limitations**

1. The random assignment of research participants to an experimental study greatly enhances the validity of that study. However, in this study, students who are participating in the GED Exit Option program have not been randomly assigned to the class. The
students in the program met specific eligibility requirements and therefore had similar characteristics. However, they were assigned to the classes based only on their geographic location in the school district.

2. The use of self-report measures might have been problematic. The participants may have responded in a socially desirable manner instead of honestly. Students were assured of anonymity and confidentiality and were encouraged to answer truthfully.

3. The mentors were volunteers from the Central Florida business community. In order to meet the school district’s requirements for mentors who work with students, it was necessary to follow specific policies that were already in place in the district. The Central Florida business community might not have been representative of the potential mentor population in the Central Florida area.

4. Both the research participants and the mentors lacked experience with developing and sustaining relationships online.

5. Since students in the randomly selected mentored class were allowed to choose whether or not they wished to have a mentor, mentored students and non-mentored students in the same class might have discussed the project with each other.

6. Three teachers participated in the program, and each teacher might have interpreted the implementation of the program differently.

7. Confounding variables such as other activities taking place in the classroom and at home might have had an impact on the results.

As with any study, there are unknown factors that may affect outcomes. For example, the general classroom environment or the relationship the student developed with the teacher might
have had more influence on the student’s achievement and self esteem than the e-mentoring program had.

Organization of the Study

The purpose of the Chapter 2, the Literature Review, is to present an overview of the significant research and theory surrounding four main topics: high school dropouts, mentoring as a possible solution to the dropout problem, a framework of one structured electronic mentoring model, and the conceptual framework of a mentoring program, as a way to successfully provide mentoring to more students across the nation. The key issues and challenges are highlighted in the review. Chapter 3 provides an overview of the methodology that was utilized in the study including the research design, the population and sample, the instruments and surveys used, the procedures that were followed, and the data analyses. Chapter 4 provides an overview of the quantitative findings and results from the qualitative phases of the study. Chapter 5 provides a summary and conclusions of the results as well as recommendations for future research.