Chapter 5
The Transformative Capacity of Telementoring on Self-Efficacy Beliefs: A Design-Based Perspective

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ABSTRACT
This chapter focuses on the intentional design of telementoring projects to enhance self-efficacy beliefs. The emphasis is on a pragmatic approach to design. Self-efficacy is defined and its importance is detailed. Intentional design which focuses upon addressing the four influences on efficacy of mastery experience, vicarious experience, verbal persuasion, and physiological state is advocated. A design-based drama telementoring research study which employed the best practices of self-efficacy and telementoring research is examined. Capacity, illustrative vignettes, and design implications for each of the four influences on self-efficacy are discussed.

INTRODUCTION
This chapter will look at the central influence that self-efficacy has on human action and how telementoring has the capacity to enhance students’ self-efficacy beliefs. Three sections form the discussion.

The first section of this chapter will examine self-efficacy. Research has shown that there is a direct link between self-efficacy and achievement. The importance of finding ways to build self-efficacy in students will be discussed.

The second section will take a look at a design-based research study that examined the effects of a drama telementoring model on students’ self-efficacy beliefs. Through this model, the importance of design will be seen in action. The self-efficacy research and the telementoring research that informed the drama telementoring model and the results of the model on the students’ self-efficacy beliefs will be examined.

The third section of the chapter will look at capacity and design issues to promote the enhancement of self-efficacy beliefs through telementoring. The capacity that telementoring holds to address the four influences on self-efficacy will be
discussed. The implications of intentional design to address each of the influences to maximize the effect of telementoring to enhance self-efficacy beliefs will be explored.

THE IMPORTANCE OF SELF-EFFICACY

The important role that self-efficacy beliefs play in human agency must be known and understood. The following poem reveals the pivotal influence that self-efficacy has in determining one’s course of action.

State of Mind
If you think you are beaten, you are.
If you think that you dare not, you don’t.
If you’d like to win, but think you can’t,
It’s almost certain that you won’t.
If you think that you’ll lose, you’ve lost.
For out in the world you’ll find,
Success begins with a fellow’s will,
It’s all in the state of mind.
If you think you are outclassed, you are.
You’ve got to think high to rise.
You’ve got to be sure of yourself before
You can ever win a prize.
Life’s battles don’t always go
To the stronger or faster man,
But sooner or later, the man who wins
Is the man who thinks he can.

—Jesse Owens

The person in this poem who has the attitude that he can win is most likely a person with high self-efficacy beliefs. But, what does self-efficacy mean? What is so important about self-efficacy beliefs? Why does telementoring hold the powerful capacity to transform one’s self-efficacy beliefs? These are the questions that will be explored, examined, and discussed in this chapter.

Self-Efficacy Defined

According to Bandura (1997), self-efficacy is the belief “…in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). Bandura (1997, 2004) stated that of all the factors in human action, none is more pervasive or more central than personal self-efficacy beliefs. Our beliefs of whether we think that we can or cannot accomplish a certain action will determine our engagement in that endeavor.

Studies have shown that people with high self-efficacy beliefs will be more motivated, will establish higher goals for themselves, will persist in pursuing those goals even in the face of obstacles or set-backs, and will ultimately achieve more than a person with low self-efficacy beliefs (Bandura, 1997, 2004; Pajares, 1996). Bandura (1997) found that high self-efficacy beliefs will increase student achievement.

All of these indicators point to the power that self-efficacy holds in each person’s life. How, then, are self-efficacy beliefs formed?

Four Influences

There are four influences on self-efficacy: (a) mastery experience, (b) vicarious experience, (c) verbal persuasion, and (d) physiological state. From these four sources, one selects, interprets, integrates, and recalls information to form judgments concerning self-efficacy (Bandura, 1997, 2004; Pajares, 1997; Pintrich & Schunk, 2002).

Mastery experience is the strongest source of self-efficacy information (Bandura, 1997, 2004; Hackett & Betz, 1981; Pajares, 1993; Schunk, 1996; Usher & Pajares, 2008). This influence is based on the successful performance of prior behaviors and actions. Successful performance is the strongest way to build self-efficacy beliefs. This influence is the most powerful because it provides authentic information about one’s capabilities. As one experiences an improvement in skills, an
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