Chapter 9

K–12 Online Student Engagement:
New Construct or Extension to Existing Construct?

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ABSTRACT

Student engagement has been shown to be essential to improving academic achievement, increasing high school graduation rates, lower dropout rates, and in the development of research-based best practices for K-12 education. It has been defined and measured in numerous ways. This chapter explores student engagement in the K-12 online learning environment and examines how student engagement is similar to but also very different from student engagement in a traditional K-12 brick-and-mortar environment.

INTRODUCTION

Every year, new techniques, theories, and best practices are implemented to improve student academic achievement, increase graduation rates, and decrease dropout rates. All of the recommendations and best practices used to improve academic achievement require a level of investment by the student (Anderson, 2017). Successful implementation of any technique, theory, or best practice requires student buy-in and participation—student engagement. Student engagement is the investment students must contribute to make all of the strategies and techniques meaningful and relevant (Appleton, Christenson, & Furlong, 2008; Fredricks & McColskey, 2012). Kuh (2009) found that engaged students are more likely to persist, achieve success, and complete qualifications for graduation. Student engagement levels are even more important in the K–12 online learning environment (Dixson, 2015), due to the challenges of student isolation and the increased need for student self-regulation (Cocea & Weibelzahl, 2011; Dixson, 2015). Through the efforts of both the students and their teachers and schools, student engagement levels can

be raised to increase academic achievement (Cano, 2015; Fredricks & McColskey, 2012; Singh, 2015), in both the traditional brick-and-mortar learning environment and the online learning environment.

While student engagement has been defined and measured inconsistently over the years (Appleton, 2017; Fredricks & McColskey, 2012), it has still grown in complexity and theoretical backing. The advancement of the definition of student engagement has enhanced the methodology of student engagement measurement (Anderson, 2017; Appleton, 2017). Student engagement has been defined in research in terms of effort (Meece, Blumenfeld, & Hoyle, 1988), time on task (Spanjers, Burns, & Wagner, 2008), and motivation (Pintrich & De Groot, 1990; Skinner & Belmont, 1993). Most recently, student engagement has been broadly defined as student involvement and time of involvement in activities and practices that lead to increased academic achievement (Axelson & Flick, 2010; Coates, 2007; Leach & Zepke, 2011; Morris, Finnegan, & Wu, 2005). In addition, student engagement has been described as pertaining to students' contribution to their academic willingness to problem solve (Axelson & Flick, 2010: Kuh, 2009).

Some researchers view student engagement as a compilation of relationships with school, teachers, administrators, other students, and self, as well as the influences of these relationships on students' academic achievement and conduct (Cano, 2015; Cremascoli, 2011; Ett, 2008). Other researchers define student engagement as a collection of contextual factors that can predict developmental and academic outcomes (Appleton et al., 2008; Fredricks & McColskey, 2012). With this range of classifications of student engagement, it is no wonder that the measure of student engagement is intricate as well.

Online student engagement, mostly in higher education learning environments, has been measured by single observed variables such as independent time in course, the number of on-task and off-task Internet activities, and motivation (Henrie, Halverson, & Graham, 2015). For primary and secondary education students, researchers have worked with traditional K–12 student engagement measures when they are using online learning resources and tutorials (Henrie et al., 2015). Yet, more research is needed to identify specific differences between traditional K–12 students and online K–12 students, if there are differences at all.

This chapter explores student engagement in the K–12 online learning environment and examines how student engagement is similar to but also very different from student engagement in a traditional K–12 brick-and-mortar environment.

HISTORY OF STUDENT ENGAGEMENT

The evolution of student engagement as an educational latent construct has run parallel to the development of online learning over the last 30 years. Both student engagement and online learning, especially K–12 online learning, are new yet developing quickly. For the K–12 traditional brick-and-mortar learning environment, educational researchers have found that as student engagement is increased it contributes to higher grades, higher state assessment scores, and better school conduct (Fredricks & McColskey, 2012; Lam et al., 2014; Skinner, Furrer, Marchand, & Kindermann, 2008). With an average Cohen's *d* effect size of 0.48, which is unusually large in education and the social sciences, it has been established that student engagement is important to academic achievement (Hattie, 2009). Now, it is critical that educational researchers begin to effect student engagement measurement and the K–12 online learning environment so that they can intersect (Henrie et al., 2015).

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