Chapter 13 A Delayed Treatment Control Group Design Study of an After-School Online Tutoring Program in Reading

S. Marshall Perry *Dowling College, USA*

ABSTRACT

This chapter concerns a year-long, United States federally-funded evaluation of Educate Online, an online, at home, 1:1 tutoring program aimed at improving reading performance for middle school students who are below grade level. Participating students receive after-school instruction from teachers in real-time over Voice over Internet Protocol (VoIP) connections. The researcher discusses study findings, the methodological challenges of conducting research on online tutoring, the multiple perspectives for understanding the effectiveness of a tutoring program, and areas for additional research. The chapter examines a key aspect of the evaluation, a delayed treatment control group design study to determine the effect that involvement in the tutoring program has upon student academic achievement in reading.

DOI: 10.4018/978-1-4666-5832-5.ch013

INTRODUCTION

The chapter concerns a year-long, national evaluation of Educate Online (EO), an online, at home, 1:1 online tutoring program aimed at improving reading performance for middle school students who are below grade level. The research was conducted by Rockman et al., a research, evaluation, and consulting company located in the United States. Participating students in the study received after-school instruction from teachers in real-time over Internet connections. A researcher discusses study findings, the methodological challenges of conducting research on online tutoring, the multiple perspectives for understanding the effectiveness of a supplemental education services program, and areas for additional research. The chapter discusses a key aspect of the evaluation, a delayed treatment control group design study to determine if involvement in the tutoring program has an effect upon student academic achievement in reading. The chapter explores two main research questions:

- As indicated by standardized test scores, what is the effect of the online tutoring program on reading performance for students in middle school who are significantly below grade level in reading?
- How, if at all, do differences in participants and amount of treatment mediate the effect?

BACKGROUND

In this section, a literature review of student achievement in after-school programs (both faceto-face and online) is provided. This is followed by a discussion of the political and research context within which the research was conducted; this provides a rationale for the study.

After-School Tutoring and Academic Achievement

In this section, research literature after-school programs and academic achievement is briefly explored. Existing research indicates that quality face-to-face after-school programs can improve academic achievement. The Harvard Family Research Project (2008) poses the question, "Does Participation in After School Programs Make a Difference?" and responds (p. 2):

The short answer is yes...A decade of research and evaluation studies, as well as large-scale, rigorously conducted syntheses looking across many research and evaluation studies, confirms that children and youth who participate in after school programs can reap a host of positive benefits in a number of interrelated outcome areas—academic, social/emotional, prevention, and health and wellness (Little et al., 2008, p. 2).

The policy brief continues by summarizing studies that support this assertion, including a two year longitudinal study of about 3000 students in 35 different schools and a meta-analysis of 35 experimental and quasi-experimental studies that demonstrate positive effects in academic achievement for participating students compared to those who are unsupervised (Vandell et al., 2007; Lauer et al., 2006). Prior research has similarly found increased academic achievement as a result of participation in after-school programs (e.g., Espino et al., 2004; Huang et al., 2000). Reisner (2004) conducted a quasi-experimental study in New York City and found increased academic achievement in program participants. The study involved The After-School Corporation (TASC) program in which data was collected over four school years from 96 TASC after-school projects and their host schools, with a total student sample of 52,000 after-school participants and 91,000 students who were enrolled in TASC host schools but not participating in TASC projects. The TASC 14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/a-delayed-treatment-control-group-design-study-

of-an-after-school-online-tutoring-program-in-reading/102443

Related Content

The Hybrid Course; Facilitating Learning through Social Interaction Technologies

Lorraine D. Jacksonand Joe Grimes (2010). Web-Based Education: Concepts, Methodologies, Tools and Applications (pp. 540-552).

www.irma-international.org/chapter/hybrid-course-facilitating-learning-through/41364

Views of Academic Staff About the Assessment Processes of Online Courses During the COVID-19 Pandemic

Ayen Karameteand Gülcan Öztürk (2022). Handbook of Research on Managing and Designing Online Courses in Synchronous and Asynchronous Environments (pp. 522-546).

www.irma-international.org/chapter/views-of-academic-staff-about-the-assessment-processes-of-online-courses-during-the-covid-19-pandemic/292381

An Application of the LS-Plan System to an Educational Hypermedia

Carla Limongelli, Filippo Sciarroneand Giulia Vaste (2009). *International Journal of Web-Based Learning and Teaching Technologies (pp. 16-34).* www.irma-international.org/article/application-plan-system-educational-hypermedia/3020

Driving Success in e-Learning Portals: Piazza, a Multi-Faculty Collaborative Model

N. Vivekananthamoorthyand Venkata Subramanian D. (2019). *International Journal of Web-Based Learning and Teaching Technologies (pp. 31-49).* www.irma-international.org/article/driving-success-in-e-learning-portals/221882

Small Group Learning

Lisa Dawley (2007). *The Tools for Successful Online Teaching (pp. 98-120).* www.irma-international.org/chapter/small-group-learning/30414