Chapter 99 Digital Learning in Rural K-12 Settings: A Survey of Challenges and Progress in the United States

Amy Valentine Foundation for Blended and Online Learning, USA

> **Butch Gemin** Evergreen Education Group, USA

> Lauren Vashaw Evergreen Education Group, USA

John Watson Evergreen Education Group, USA

Christopher Harrington Institute for Teaching and Leading, USA

Elizabeth LeBlanc Institute for Teaching and Leading, USA

ABSTRACT

Discussions of rural America often summon images of pastoral farmland, country roads, and close-knit communities; this vision offers a sharp contrast to contemporary perspectives of rural America, which highlight unemployment, entrenched poverty, economic decline, and geophysical isolation. However, both narratives share one characteristic: the belief that a high-quality education can open a world of opportunities for rural children. This chapter fills an existing gap in research by documenting successful practices of digital learning to support students, teachers, and families in rural education settings. A qualitative study identified the challenges faced by rural schools and then explored the digital learning strategies used to meet these challenges. Across the country, innovative practitioners are expanding Internet access, addressing teacher shortages, and increasing course offerings, which has in turn contributed to the academic achievement and future prosperity of today's rural students.

DOI: 10.4018/978-1-7998-8047-9.ch099

INTRODUCTION

Rural America holds an outsized influence on how Americans perceive their country. In recent years, the national narrative around rural America has shifted from being largely positive and even mythical, to one that emphasizes the challenges, including the lack of educational and economic opportunity for residents. Much of the available research on digital issues in rural education examines infrastructure needs or remote course access, but provides few solutions, outcomes, or exemplars. This qualitative study presents a focused look at the evidence-based policies, programs, and digital learning strategies used to address the challenges of rural education settings. The first sections of the chapter present a definition of what *rural* means and how rural education specifically is characterized, as well as the methodology used for research. The following sections examine the results of the team's study, including the challenge set identified by rural programs, districts, and schools, through the lens of the strategies applied to successfully address these challenges. Final sections examine the implications of the study and look ahead to next steps for further research. This chapter builds upon the work of the Foundation for Blended and Online Learning's (FBOL) 2018 report, Digital Learning Strategies for Rural America: A Scan of Policy and Practice in K-12 Education. By sharing effective practices widely, we hopes to accelerate adoption of digital learning strategies at the national, state, and district levels to better meet rural education needs. A list of key terms and characterizations appears at the end of this chapter.

WHAT IS RURAL?

The first step in understanding rural education and the implications of leveraging digital technology to support improved student outcomes in this area is to develop a working definition of *rural* and what characterizes rural regions. The U.S. Census Bureau (2010) defines *rural* as "any population, housing, or territory" (p. 1) not included within one of the nation's identified urban areas of 50,000 people or more or the nation's urban clusters of 2,500 to 50,000 people. Using this urban-centric calculation, a clear dichotomy emerges; rurality as examined by geographical area differs greatly from rurality as defined by population. While rural areas cover 97% of the nation's land area, they contain less than 20% of the population (U.S. Census Bureau, 2016). While the tendency is to think of the rural land areas such as the mountains and deserts of the western U.S. and or the plains of the Midwest, as demonstrated in Figure 1, most of the nation's approximately 60-million-person rural population tends to live outside the fringes of cities. This is particularly notable in the southern part of the country and east of the Mississippi River.

Throughout the chapter, we have relied on education locale codes generated by the National Center for Education Statistics (NCES), which align with the U.S. Census Bureau's classifications. These locale codes and their definitions are replicated below as Figure 2. Some school and district strategies shared in this study occurred in what are technically NCES town locales; however, if these schools or districts served a significant number of rural students, their stories were included. Of the U.S. rural student population, roughly 60% are in fringe-rural schools, 30% are in distant rural areas, and 10% are considered remote (FBOL, 2018, p. 8).

31 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/digital-learning-in-rural-k12-settings/271244

Related Content

A New Method for Measuring Text Similarity in Learning Management Systems Using WordNet Bassel Alkhatib, Ammar Alnahhasand Firas Albadawi (2014). *International Journal of Web-Based Learning and Teaching Technologies (pp. 1-13).*

www.irma-international.org/article/a-new-method-for-measuring-text-similarity-in-learning-management-systems-usingwordnet/113269

The Impacts of Distance Interactivity on Learners' Achievements in Online Mobile Language Learning: Social Software and Participatory Learning

Morteza Mellatiand Marzieh Khademi (2015). International Journal of Web-Based Learning and Teaching Technologies (pp. 19-35).

www.irma-international.org/article/the-impacts-of-distance-interactivity-on-learners-achievements-in-online-mobilelanguage-learning/126931

The Future of Immersive Instructional Design for the Global Knowledge Economy: A Case Study of an IBM Project Management Training in Virtual Worlds

Lia DiBelloand Whit Missildine (2011). International Journal of Web-Based Learning and Teaching Technologies (pp. 14-34).

www.irma-international.org/article/future-immersive-instructional-design-global/62090

The Integration of Web2Quest Technology into Multicultural Curriculum in Teacher Education: A Potential for Globalization

Li-Mei Grace Linand Chris L. Ward (2013). *Curriculum, Learning, and Teaching Advancements in Online Education (pp. 46-60).*

www.irma-international.org/chapter/integration-web2quest-technology-into-multicultural/76736

Supporting Learners in the Classroom: The 3CE Model of Course Facilitation

Liston William Bailey (2019). Educational Technology and the New World of Persistent Learning (pp. 176-187).

www.irma-international.org/chapter/supporting-learners-in-the-classroom/220184