

# Navigating Emergency Remote Teaching During the COVID-19 Pandemic: A Case Study of Rural Elementary Teachers

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## **EXECUTIVE SUMMARY**

*The COVID-19 pandemic began in the late months of 2019, and by Spring of 2020, in an effort to limit transmission of the virus, schools across the globe closed and transitioned to emergency online teaching. This disrupted the schooling for over 80% of the students worldwide. While the move to online teaching and learning was inevitable, many learners, especially in rural and remote areas, found that online schooling had certain challenges due to lack of access, lack of resources, lack of infrastructure, unavailability of devices, and a lack of qualified teachers who can assist with online learning. To be able to transition to online teaching, teachers too had to adjust their instructional strategies and pedagogies. How did teachers and students navigate this sudden shift to online teaching and learning?*

## **INTRODUCTION AND PROBLEM STATEMENT**

Today K-12 classrooms include both access to and use of technology as a matter of both policy and necessity (Chapman, Masters, & Pedulla, 2010; Warschauer, Knobel, & Stone, 2004). The Elementary and Secondary Education Act of 2001 stated that schools need to mandatorily emphasize on technology integration in all areas of K-12 education (Barrett, Moore, & Slate, 2014; U.S. Department of Education, 2011). However, in K-12 the use of technology is not homogenous as it is affected by multiple factors like, policy, attitude and belief of teachers towards technology and geographical location of schools and students (Dolan, 2016). Technology integration and curricular plans, however, were suddenly upended in the beginning of the year 2019. The Covid-19 pandemic began in the late months of 2019 and by Spring of 2020, in an effort to limit transmission of the virus, schools across the globe closed and transitioned to

emergency online teaching (Jelińska & Paradowski, 2021). This disrupted schooling for over 80% of the students worldwide (International Labor Organization, 2020; UNESCO, 2020). Reverting to emergency online teaching left many teachers and faculties at the mercy of self-learning because campus and school support personnel for online learning was not able to provide support to a huge pool of teachers and faculties (Hodges, et. al., 2020). While the move to online teaching and learning was inevitable, many learners, especially in rural and remote areas found that online schooling had certain challenges due to lack of access, lack of resources, lack of infrastructure, unavailability of devices, and a lack of qualified teachers who can assist with online learning (Dube, 2020). To be able to transition to online teaching, teachers too had to adjust their instructional strategies and pedagogies (Mahmood, 2020). This study explores rural elementary teachers' (who taught online during the Covid-19 pandemic) experiences while teaching online, the challenges they faced, and their perspectives of how the students navigated this sudden online distance learning. This study will employ the lens of digital divide to understand teachers' experiences of *online remote teaching*.

During the pandemic, educational technology gained a whole new prominence as it became the sole means of imparting education. In K-12 education the depth of technology integration is not homogenous as it is often decided by multiple factors such as, pre-existing policies on technology integration, technology inclusive curriculum, attitude and belief of teachers towards technology, professional development of teachers, technical support available to teachers and students, software, hardware, and bandwidth available, geographical location of the schools (and students and teachers), and their socioeconomic status (SES) (Dolan, 2016). Thus, although many rural schools may have enough funds to make technology available for their students, there are still many students who lack access to technology at home for several reasons that could be linked to SES of student families or the general issue of access to technology (Attewell, 2001; Garland & Wotton, 2001; Lieberman, 2020; Ritzhaupt et al., 2013). The division between those with and without access to technology at (school and) home is referred to as the '*digital divide*' (Blackwell et al., 2014). Currently the issue of access to technology is regarded as the *first level digital divide* and literature shows that this gap is closing considerably (Campos-Castillo, 2015). When the issue of access is addressed, researchers may explore how technology is used and for what purposes. The *second level of digital divide* endeavors to capture the purposes and quality of technology use (Hohlfeld, Ritzhaupt, Barron, and Kemker, 2008). For the context of this study, the presence of the *second level of divide* is manifested in how technology is used in rural elementary classrooms (Sundeen & Sundeen, 2013; Thiemann & Cevallos, 2017) and for distance education during the pandemic. During the period of *ERT*, how teachers and students navigated technology became a crucial component of their participation in teaching and learning (Carretero et al., 2021). Hohlfeld et al., (2008) outlined the levels of digital divide (Figure 1), which is used as a conceptual framework in this study (Ravitch & Riggan, 2017).

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