

Chapter 11

A Reconstruction of Rural Teachers' Technology Integration Experiences: Searching for Equity

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ABSTRACT

Teachers who integrate information and communication technologies (ICT) to their practice in rural areas face important challenges that differ from those where contextual conditions are most favorable. The purpose of this chapter is to describe how and why a phenomenological research approach applied to the reconstruction of rural teachers' experiences in incorporating ICT's to their practice can be helpful for both, for research purposes as well as for inspiring the avenues that rural teacher education in the digital age should follow. Based on the narratives of eight teachers working in poor rural schools of Mexico, this chapter describes how, as part of a construction of their own rural pedagogies, these teachers integrate ICT to their practice in response to three levels of contextual demands. Lessons learned and recommendations for research of this kind are provided.

INTRODUCTION

The Digital Age has certainly transformed our societies in a way that has changed how we interact in many spheres, be it socially, economically or productively (Castells, 2004). Nevertheless, the digital divide still exists and teaching with technologies continues to be a challenge, given that

we still have so much to learn about how teachers build the necessary knowledge to integrate information and communication technologies (ICT) in an appropriate way to their practice. In the educational arena, this gap becomes an important concern since, ideally, all schools should be allowing students develop the necessary skills to become part of a society where these tools tend

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to be present in almost any aspect of our lives, as has been shown by several studies (Trilling & Fadel, 2009; Morin, 2007). Moreover, another gap is present between pre-service teacher education and the demands of rural contexts, which new teachers are frequently not ready to face.

Teachers who integrate ICT into their practice in rural areas face important challenges that differ from those where contextual conditions are more favorable. Bearing in mind the premise that the editors of this handbook state that “teaching with technologies is complex, multi-faceted, and situated,” the processes that take place in rural settings are research topics worthy of study.

The purpose of this chapter is to describe how and why a phenomenological research approach applied to the reconstruction of rural teachers' experiences in incorporating ICT into their practice can be helpful, both for research purposes and for inspiring the avenues that rural teacher education in the digital age should follow. To accomplish this purpose, we present a case study based on the narratives of eight teachers, which describe how they integrate ICT into their practice, as part of the construction of their own rural pedagogies. These experiences occurred in extremely poor rural schools in Mexico and are presented according to three levels of context.

Background

Talking about rural teacher education in the digital age necessarily leads us to consider broader views of ICT integration. Therefore, we begin this section by recalling the promises of technology and the digital divide, which leads us to three statements about rural teacher education aimed at integrating ICT: (i) conditions in rural and urban contexts differ, (ii) standardized top-down policies and programs for ICT integration in education will not work, (iii) pedagogical integration of ICT in rural areas should value what is being developed by rural teachers. Finally, we review some approaches to

teacher education and research in rural education, focusing on phenomenological methods.

The generalized introduction of ICT and Internet that started in the late 1980s and early 1990s worldwide was accompanied by the optimistic words of governmental and nongovernmental programs alike, promising equity, justice, social and economic development in rural areas. Although history has shown that several technologies have been perceived as *panaceas* when they appear, expectations with ICT and Internet were particularly high considering the potential they had for bringing important services (e.g., health, education), as well as other social and economic benefits to remote locations. Based on such premises, the idea of “ICT access for all” was mentioned in most international agencies' recommendations at the dawn of the 21st century (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2000; World Summit of the Information Society [WSIS], 2002).

Accordingly, in many countries programs such as telecenters and computer access were established in rural areas, aiming to reduce the digital divide, which was foreseen as a possible shadow that would leave them out of the new economy, as well as of the promised social benefits, thus increasing the already huge differences among socioeconomic regions and groups. Reality soon showed that programs with simplistic views that focused on technology only, instead of a more comprehensive conception of inequity, would not succeed (Salinas, Porras, Santos & Ramos, 2004). Furthermore, not taking into consideration the complex interactions of several factors that are present in underprivileged settings became the main obstacle in reducing the digital divide, thus a closer look at such phenomena in diverse settings is needed.

Merrit (2011) organized the findings of several studies on factors affecting the diffusion of the Internet in different countries into primary factors (e.g., GDP *per capita*, market competitiveness, government regulation, direct foreign investment,

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