Chapter 2.6
Inadequate Infrastructure and the Infusion of Technology into K–12 Education

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INTRODUCTION

Although the lack of adequate funding is probably the most significant barrier to the effective infusion of technology (since bundles of money could eliminate almost all other barriers), I will focus on “inadequate infrastructures” as the most impregnable obstacle in rural schools. According to the dictionary, an infrastructure is “an underlying base or foundation” (www.dictionary.com). As I see it, following this definition, a school’s infrastructure would include teachers, the physical requirements needed to support a robust network, and the community of recipients or users.

Many of the teachers in rural school districts are older, approaching retirement, relatively set in their ways, and have little interest in infusing technology into their teaching. Many others are relatively new to the profession and, even if prepared in the new technologies, reticent to make waves or move too quickly to change the status quo in the schools in which they have just begun to teach. The older, more seasoned teachers are from a generation not typically exposed to computers and have had very little opportunity to become familiar with the new technologies. Generally, they have had some training in the use of the most common technological tools, but received no help in how to incorporate these tools into the classroom, much less use them to enhance the curriculum. Most teachers, whether old or new, have begun to use technology for administrative functions, for example, attendance and grade books, but they are not using them in instruction or assessment. Most feel that they have been “successful teachers” in the past without this technology, so they wonder why they would need to incorporate it now. “I’m too old to start learning that stuff now” becomes an excuse for doing things the same old way. Even those teachers who would like to learn how to use and infuse the new technologies generally face many hurdles before being able to do so. In most cases, they teach in small schools that are just now obtaining Internet connections. Many
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