

## Chapter 6

# Exposing Mental Models to Accelerate Distance Learning Environments

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### ABSTRACT

*This chapter forms one part in a series of chapters offering recommendations to design effective distance and blended learning. The COVID-19 pandemic has been an unintended catalyst for change in schools. Due to the closing of school buildings in the spring of 2020, school districts were forced to quickly transition to distance learning or blended learning. Even before COVID-19, many districts failed to successfully and systematically implement the new knowledge and skills acquired in these sessions. So, the question is, why has blended and distance learning practices continued to function in pockets throughout a school district and not systematically throughout the school organization? One can argue that full implementation was impeded by the lack of budgetary resources and infrastructure or unaligned curriculum, instruction, and assessments.*

### INTRODUCTION

*“Insanity is continuing to do the same thing over and over and expecting different results.” Albert Einstein*

The COVID-19 pandemic has led to an unintended catalyst for change in schools. Due to the closing of school buildings in the spring of 2020, school districts were forced to quickly transition to distance learning or blended learning. While this rapid shift to a new learning environment, the concept of distance and blended learning models are not novel to schools. Over the course of the past decade, many districts participated in professional development opportunities in this area through organizations such as Digital Promise, International Society for Technology in Education (ISTE), Consortium for School Networking (CoSN), and Future Ready Schools. Yet, even before COVID-19, many districts have failed to successfully and systematically implement the new knowledge and skills acquired in these sessions.

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So the question is why has blended and distance learning practices continued to function in pockets throughout a school district and not systematically throughout the school organization? One can argue that full implementation was impeded by the lack of budgetary resources and infrastructure or unaligned curriculum, instruction, and assessments. However, according to Peter Senge, “many insights into new markets or outmoded organizational practices fail to get put into practice because they conflict with powerful, tacit mental models.” Senge defines mental models as “deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action.” “For more than a century, the American educational system has been guided by an Industrial Age paradigm that controls how school systems are designed, how they organize and deliver educational services to children. This mental model is stubbornly resistant to change” (Duffy, 2014).

This chapter will examine the power mental models have on impeding school transformation and organizational learning as well as provide recommendations on how to accelerate blended and distance learning throughout a school organization.

## **No Child Left Behind and Technology Integration**

The reauthorization of Elementary and Secondary School Act or more commonly referred to as *No Child Left Behind Left Behind (NCLB)* in 2002 called for major fundamental shifts to schools. While there were two previous National Education Technology Plans developed in 1996 and 2000, NCLB called for a transition from buying the latest technology and then planning on how to use it to a focus on how technology can be used to improve student outcomes. More specifically, the Act emphasized the improvement of student achievement through the utilizing technology in schools through integration initiatives, building access and accessibility, and training parents/guardians.

### **Technology Integration**

Building a comprehensive technology infrastructure is a critical part of effective technology in schools. In building the capacity of technology in schools, the infrastructure must be integrated into all learning environments including classrooms and library media centers as well as administrative offices. Research-based technology integration can enhance student learning across the curriculum. By integrating technology into the classroom, teachers were able to engage students in their own learning by incorporating web-based tools in the lessons.

### **Access and Accessibility**

NCLB drew attention to the issue of access and accessibility. In order to achieve accessibility, schools would need to invest in an electronic infrastructure that would enable broadband, high-speed internet connections. NCLB stressed that schools must meet this expectation for all students and their parents, especially in geographically isolated areas. Furthermore, the Act strongly reinforced the need for providing technology integration and technology literacy for all students, including students with disabilities, racial and ethnic minorities, low-income students, and English language learners.

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