

## Chapter 62

# The Impact of Technology on School Leadership

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### ABSTRACT

*This article is intended primarily for school leaders and those with an interest in school leadership within the compulsory school sector. Although it has a focus on the use of digital technology in schools, particularly e-learning, the chapter will be of interest to all school leaders, as it has a strong focus on the justification for school leaders to include digital technology within their strategic vision planning.*

*Past, present, and future perspectives on the impact of technology on school leadership are included, viewed through the framework of published school leadership standards. The chapter concludes with comment about technology induced issues likely to be faced by school leaders in the near future, followed by advice about the personal qualities required for future school leaders to confront these issues.*

### INTRODUCTION

What is the relevance of a chapter about the impact of technology on school leadership in an era of increasing public accountability, where questions about the role of schools and standards of educational attainment are more frequently heard? The author argues that it is critically relevant. Educational technology of some kind can be found in

almost every school within the developed world and many of the latest technological developments have become more targeted towards the enormous worldwide educational market. Sound academic research (Robinson, Hohepa, & Lloyd, 2009) indicates that the school leader's role is critical to the achievement of positive learning outcomes for students, with technology being increasingly seen, rightly or wrongly, as a contributing factor to those outcomes.

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Who are the school leaders to whom this chapter is addressed? In the context of this chapter, school leaders comprise two distinct groups, those who have a formally constituted role and those who exercise leadership informally. Titles differ from country to country and jurisdiction to jurisdiction but, the former group includes titles such as school superintendents, principals, headmasters, deputy leaders, middle management leaders, curriculum leaders, and also groups such as school governors and trustees. The latter group comprises those who do not have a formal title but who have an influence on leadership issues. Those who have a particular talent not formally recognized in a title, such as the most technologically literate teacher in the school, the most experienced teacher in the school or, a person from a particular cultural or language group, also exert leadership in an indirect manner. These people are often consulted on leadership issues or offer germane comments in meetings and within reports on leadership issues, their opinions being particularly valued despite their personal lack of a formal leadership title on their job description.

Leadership is distinct from management and administration (Latchem & Jung, 2010). One distinction found within many definitions denotes leadership as a visionary process, usually collaboratively developed, where change decisions are made, whereas management and administration imply an authority relationship between managers and subordinates whereby change is implemented and stabilized (Razik & Swanson, 2010). The term leadership in its broader sense has been selected to be the focus of this chapter because “Leadership is necessary to create, articulate, and implement a vision of what should be.” (Surgenor, 2009, p. 64).

School leadership theories abound but may be grouped into two categories, transformational and pedagogical. Transformational leadership includes qualities such as vision and generalized abilities to stimulate motivation and effort; it is equally applicable to schools and businesses. Pedagogical leadership has, by definition, a focus on teaching

and learning, so is thereby more applicable to the school context than to business (Robinson, Hohepa & Lloyd, 2009). Both theoretical frameworks will be considered in the discussion that follows, as both are applicable to varied forms of leadership within the education sector.

Technology is an inclusive term for applied science, often associated with machinery. The more commonly applied form of technology in schools is information and communication technology (ICT), technology such as computers in all their various forms, mobile phones and the like, that are used to manipulate information, communicate between people and access the internet. Use of ICT tools to assist learning is often termed e-learning. In this chapter the term technology will be primarily used in reference to ICT, both e-learning and administrative use of ICT tools, as both will be shown to be relevant to educational leadership.

The discussion that follows will briefly review the historical impact of technology on school leadership to provide a baseline for the discussion, then examine the impact of technology on school leaders in the present and, finally, attempt to envisage the impact of technology on school leadership in the near future.

## **BACKGROUND**

For most of the history of schooling up to the middle of the 20th century, technology utilization was print-based, being confined firstly to slates, then pencil and paper, followed by distribution devices such as the unreliable, smelly and messy spirit duplicators (Banda) and gestetners that morphed into much more user friendly photocopiers, plus some use of the telephone for administration and communication (Bates, 1993). Apart from providing teachers with a tool that facilitated more widespread use of worksheets, these technological innovations were focused more on the administrative component of schooling than student learning, were relatively simple for school

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