

# Chapter 1

# Project Management of Educational Technology Projects

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## EXECUTIVE SUMMARY

*Technology plays an important role in the delivery of education and training in school and non-school settings. Educational technology projects range from providing electronic whiteboards in K-12 classrooms to implementing campus-wide learning management systems on college campuses to deploying mobile devices for training delivery in non-profit organizations to developing performance improvement interventions for business organizations. These projects are carried out using a variety of tools, methodologies, and process, both formal and informal. In general, these projects can be described using the project management framework. This chapter introduces the project management framework and draws conclusions about its use in education and training from the 18 cases of educational technology projects presented in this book. The cases represent a range of project management approaches, from the generic and foundational to the highly complex and sophisticated.*

DOI: 10.4018/978-1-4666-4237-9.ch001

## **PROJECT MANAGEMENT**

Broadly speaking, project management is the planning, structuring, execution and tracking of all resources and activities to achieve specific project goals. A project is a temporary endeavor that has a definite beginning and end and is undertaken to create a unique product, service or result (Project Management Institute, 2013). A project ends when its goals have been achieved, when the project's goals cannot be achieved or when there is no longer a need for the product/service/result the project intended to achieve. Although the project is temporary, its outcomes are not. Projects are undertaken to produce a lasting outcome. Examples of projects include new software applications, new or revamped educational programs or curricula, new or improved work processes to enhance organizational efficiency, the construction of a new building, or a research project to create a specific body of knowledge or product that will benefit society. People will often utilize a project as a means of achieving an organization's strategic plan. Projects are typically authorized because of market demand (such as authorizing a new brand of learning management system in response to dissatisfaction with existing brands); organizational need (such as a training company authorizing a project to create a new course to increase its revenue); customer request (such as a sales division asking the training and development unit to create a workshop for new sales reps); technology advances (such as cloudy computing as a means of hosting teaching and learning applications); legal requirements (such as mandatory compliance training at the federal, state, or professional certification level).

Managing a project typically includes responsibilities such as identifying project requirements; stakeholder needs and expectations when planning and executing the project; establishing and maintaining active, effective, and collaborative communications among stakeholders, and; balancing competing project constraints such as scope, quality, schedule, budget, resources, and risks.

Project management has its roots in several industries, particularly construction, engineering and defense but emerged as a separate discipline in its own right in the 1950s. Specific tools, techniques, technologies, processes and procedures began to emerge to facilitate project scheduling, cost estimation and management, as well as human resource planning. Early practitioners of project management formed professional associations focused on creating a standard set of project management processes. Today the largest project management associations are the European-based International Project Management Association (IPMA), a federation of 50 national associations with the U.K. and Germany representing the largest proportion of members and the U.S.-based Project Management Institute (PMI), representing more than 700,000 project management professionals worldwide. IPMA focuses

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