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Chapter VI

Resource-Based Learning and Informal Learning Environments:
Prospects and Challenges

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Abstract

Recent changes in the role of resources have not only transformed how we think about resources, they have distributed production of and access to digital resources while altering fundamentally how, when, and for what purposes resources are created and used. The metamorphosis has been propelled by the exponential growth of information systems such as the Internet and the Web, and the ubiquitous presence of enabling technologies in classrooms, libraries, museums, homes, businesses, and communities. These changes portend exciting educational opportunities, particularly in resource-rich environments such as science centers and museums. In this chapter we explore RBL and ILEs, providing examples of how an RBL approach might be implemented in an ILE and describing the opportunities and challenges associated with such an endeavor.

Introduction

During recent years, the definition, role and uses of resources have undergone a metamorphosis. The changes have transformed how we think about resources, the distributed production of and access to digital resources, and how, when, and for what purposes we create and use them. The metamorphosis has been propelled by the exponential growth of information systems such as the Internet and the Web, and the ubiquitous presence of enabling technologies in classrooms, libraries, museums, homes, businesses, and communities.

While increasing the numbers of and access to resources is energizing, realizing the educational potential of these breakthroughs may prove daunting. This is particularly true in formal learning settings (i.e., school), where current practices do not emphasize optimizing available resources or preparing individuals to learn in resource-rich environments. Informal learning environments, in contrast, offer considerable promise for resource-based learning (RBL). Science museums and centers, for example, provide a variety of resources to investigate, as well as learning from and with, as visitors explore exhibits. Informal environments offer freedom not available in formal environments, where instruction usually focuses on established curriculum goals, sequences, resources, and activities. Informal learning environments provide an opportunity to exploit resource-based learning alternatives, expanding both the materials and methods used in teaching and learning.

The purpose of this chapter is to provide an overview of resource-based learning (RBL) and its applications within informal learning environments (ILEs). We begin by providing an overview of resource-based learning, describing RBL components, what they are and how they work. Next, we discuss RBL examples in science centers/museums. Finally, we describe both opportunities and challenges associated with RBL in informal learning environments.

Overview of Resource-Based Learning

Resource-based learning "…involves the reuse of available assets to support varied learning needs" (Beswick 1990). Several factors make resource-based learning (RBL) viable: 1) increased access to resources (print, electronic, people) in a variety of contexts not previously available; 2) resources are increasingly flexible in their manipulation and use; and 3) economic realities dictate that resources become more readily available, manipulable, and shareable across a variety of contexts and purposes.

Increased Access

The raw amount of information we are exposed to on a daily basis increases exponentially. Recently, researchers at the University of California-Berkeley estimated that information