Chapter II

Education, Learning, and Technology

J. Ana Donaldson
University of Northern Iowa, USA

Nancy Nelson Knupfer
Digital Horizons, USA

INTRODUCTION

The classroom is a jumble of bright colors and excited children. I enter as a guest into a world of noise, chaos, and learning. A reptile-enriched environment surrounds the children. There is a multitude of colorfully illustrated resource books; lizard-related images crowd each other on bulletin boards; and multi-hued plastic bins are filled with glassy-eyed stuffed reptiles. One youngster proudly introduces me to the class frog in a terrarium while another child shyly approaches and takes hold of my hand, offering to share a picture of an alligator that she has found on the Web.

My trek into the unknown world of a second grade class coincides with the final stages of a technological variation on a game of my youth, “20 Questions.” A list of 18 negative, yet informative, responses to the e-mail game with an across-town second grade class is posted on the front chalkboard. The long list includes the following notations: “It doesn’t have eyelids; It lives in a warm climate; There is something unusual about it.” The 27 students on this end of the game are down to only two remaining responses to...
guess what type of lizard the other class has chosen as the “mystery reptile.” There is a sense of urgency in the class as each eager student attempts to unravel the identity of the secret creature.

Two mop-headed, jean-clad boys eagerly sit at a solitary computer searching the Internet for information on Komodo Lizards and Flying Dragons. Other students are sharing a variety of animal picture books, looking for reptiles that will meet the criteria for the eighteen clues that they have posted. Three diminutive, pastel-clad girls are flipping through the pages of an encyclopedia while another pair is waiting their turn at the computer in order to view a CD-ROM that might reveal the elusive answer. Several students breathlessly approach both the teacher and myself to talk enthusiastically about what they consider to be the most likely candidate for the next response.

I take a moment to view the activity in the classroom. Every student is actively involved with collaborative research and discovery learning. They are using higher-level learning skills by applying a process of comparative logic and selection based on elimination. Yes, it is noisy, but more importantly, there is learning occurring. The energy and sense of involvement within this group of second graders is an example of what is possible in a student-centered, engaged-learning classroom environment. The classroom is abuzz with bright eyes and smiles, and the biggest smile is on the face of the teacher.

After months of teacher preparation, two second grade classes had joined forces to partner on a life science project, which integrated technology into the curriculum within an engaged-learning environment. This scenario represents one slice of an afternoon in the year long project supported by a grant from the Higher Education Cooperation Act (HECA) with Triton College in River Grove, Illinois. It is an example of what can happen when technology combines with pedagogy to actively engage the students in the learning process. All children had an active role and the technology was used to support an activity that otherwise would have been impossible to accomplish between the two schools.

**OBJECTIVES FOR THIS CHAPTER**

This chapter posits that technology can be used successfully in schools, but that it will be more likely to enhance learning if certain considerations are addressed and appropriate guidelines are followed. After positioning technol-
35 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the product's webpage:

www.igi-global.com/chapter/education-learning-technology/8203?camid=4v1


www.igi-global.com/e-resources/library-recommendation/?id=1

Related Content

Students’ Joint Reasoning about Gas Solubility in Water in Modified Versions of a Virtual Laboratory

www.igi-global.com/article/students-joint-reasoning-about-gas-solubility-in-water-in-modified-versions-of-a-virtual-laboratory/129967?camid=4v1a

The Effects of the Instructional Video on Pre-Service Teachers’ Technology Learning in an Online Environment

www.igi-global.com/chapter/effects-instructional-video-pre-service/58470?camid=4v1a

Weaving Web 2.0 and Facial Expression Recognition Into the 3D Virtual English Classroom

www.igi-global.com/chapter/weaving-web-20-and-facial-expression-recognition-into-the-3d-virtual-english-classroom/183571?camid=4v1a
An Instructional Design “Use Case”: Instructional Technologies for Developer Stakeholders
www.igi-global.com/chapter/instructional-design-use-case/61269?camid=4v1a