# Chapter 8 Collaborative Teaching Clusters at Carnegie Mellon University

**Connie Deighan Eaton** Carnegie Mellon University, USA

Kimberly A. Hennessey Carnegie Mellon University, USA

Cheryl Koester Carnegie Mellon University, USA

#### EXECUTIVE SUMMARY

Student and faculty needs for computer labs at Carnegie Mellon University have changed significantly in recent years to include collaborative workspace and support for multiple instructional activities during class times. The Collaborative Teaching Cluster (CTC) uses technology, furnishings, and a novel physical layout to meet these evolving needs. The CTC accommodates multiple kinds of instructional activities in one space and fosters interactions between faculty and students, group collaboration, and sharing student work.

DOI: 10.4018/978-1-4666-2673-7.ch008

Copyright ©2013, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

## ORGANIZATION BACKGROUND

Carnegie Mellon University is a global research university with more than 11,000 students, 86,500 alumni, and 4,000 faculty and staff. Recognized for its world-class arts and technology programs, collaboration across disciplines, and innovative leadership in education, Carnegie Mellon is consistently a top-ranked university: (Carnegie Mellon University, 2011a)

Carnegie Mellon University has been a birthplace of innovation throughout its 111year history. Today, we are a global leader bringing groundbreaking ideas to market and creating successful startup businesses. Our award-winning faculty members are renowned for working closely with students to solve major scientific, technological and societal challenges. We put a strong emphasis on creating things—from art to robots. (Carnegie Mellon University, 2011b)

Carnegie Mellon University has a centralized information technology (IT) division, called Computing Services, and embedded IT departments or staff in individual colleges, schools, and departments. Computing Services is subdivided into several entities, including Academic Technologies Services (ATS) and Cluster Services. The term *clusters* may refer to both the computer labs on Carnegie Mellon's campus and the department that runs them.

Carnegie Mellon University's Computing Services group seeks to support this spirit of innovation and creativity by developing unique and useful services and spaces for campus. They often partner with the embedded IT groups in academic and administrative departments to support departmental needs while bringing improved service to the entire campus.

## SETTING THE STAGE

## Before the Redefinition of Clusters Program

In early 2007, at the inception of the Redefinition of Clusters (ROC) project, Computing Services provided seventeen public cluster, or computer lab, spaces in seven buildings across the Pittsburgh campus. At that time, fifteen of these cluster spaces could be reserved for academic classes. The remaining two spaces were dedicated learning spaces, open to students, faculty, and staff with no reservations. Computing Services also supported Linux timeshare servers available for remote access. 22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <u>www.igi-</u> global.com/chapter/collaborative-teaching-clusters-carnegiemellon/72675

## **Related Content**

Studio Pedagogy: A Model for Collaboration, Innovation, and Space Design Russell G. Carpenter, Leslie Valley, Trenia Napierand Shawn Apostel (2013). *Cases on Higher Education Spaces: Innovation, Collaboration, and Technology (pp. 313-329).* 

www.irma-international.org/chapter/studio-pedagogy-model-collaboration-innovation/72683

#### Online Learning Conversations: Potential, Challenges and Facilitation

Jakko van der Pol (2009). Information Technology and Constructivism in Higher Education: Progressive Learning Frameworks (pp. 112-129). www.irma-international.org/chapter/online-learning-conversations/23492

# Faculty Participation in Online Higher Education: What Factors Motivate or Inhibit their Participation?

Michael S. Hoffman (2014). Cases on Critical and Qualitative Perspectives in Online Higher Education (pp. 61-78).

www.irma-international.org/chapter/faculty-participation-online-higher-education/96105

# Computer Skills and Prior Experience with E-Learning Courses as Factors that Affect Development of Intellectual Thinking Dispositions in Online Learning

Dan Bouhnikand Golan Carmi (2014). *Multicultural Awareness and Technology in Higher Education: Global Perspectives (pp. 302-323).* 

www.irma-international.org/chapter/computer-skills-and-prior-experience-with-e-learningcourses-as-factors-that-affect-development-of-intellectual-thinking-dispositions-in-onlinelearning/103769

# The Role of Technology in Improving Quality of Teaching in Higher Education: An International Perspective

Harriet Thindwa (2015). Handbook of Research on Innovative Technology Integration in Higher Education (pp. 54-73).

www.irma-international.org/chapter/the-role-of-technology-in-improving-quality-of-teaching-inhigher-education/125108