

# Elements of Quality Online Education

Practice and Direction

Edited by *John Bourne & Janet C. Moore*



**The Sloan Consortium**

A Consortium of Institutions and Organizations  
Committed to Quality Online Education

Volume 4 in the Sloan-C Series

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# Elements of Quality Online Education:

**Practice and Direction, Volume 4 in the Sloan-C Series**

This is the fourth volume in the annual Sloan-C series of case studies on quality education online. In 1999, 2000, 2001, and 2002, the Sloan Foundation selected expert contributors to report on work in progress and to collaborate on research of importance to asynchronous learning networks. Each volume publishes contributions in the form of documented, peer-reviewed scholarly studies of learning and cost effectiveness, access, and faculty and student satisfaction.

## **Other titles available in this series:**

Elements of Quality Online Education

Volume 3 ISBN 0-9677741-2-8

Online Education: Learning Effectiveness, Faculty Satisfaction, and Cost Effectiveness

Volume 2 ISBN 0-9677741-1-X

Online Education: Learning Effectiveness and Faculty Satisfaction

Volume 1 ISBN 0-9677741-0-1



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Sloan-C has its administrative home at the Sloan Center for OnLine Education (SCOLE) at Olin and Babson Colleges. SCOLE has been established as a center that spans the two campus of Olin College and Babson College. SCOLE's purpose is to support the activities of the Sloan Consortium, a consortium of higher-education providers sharing the common bonds of understanding, supporting and delivering education via asynchronous learning networks (ALNs). With the mission of providing learning to anyone anywhere, SCOLE seeks to provide new levels of learning capability to people seeking higher and continuing education. For more information about SCOLE, visit [www.scole.olin-babson.org](http://www.scole.olin-babson.org).

For more information about Olin and Babson Colleges, visit [www.olin.edu](http://www.olin.edu) and [www.babson.edu](http://www.babson.edu).



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# Elements of Quality Online Education: Practice and Direction

Volume 4 in the Sloan-C Series

## Introduction

*Frank Mayadas, John Bourne, Janet C. Moore* .....7

## I. Learning Effectiveness

1. Learning Effectiveness: What the Research Tells Us  
*Karen Swan* ..... 13
2. Cognitive Presence for Effective Asynchronous Online Learning: The Role of Reflective Inquiry, Self-direction and Metacognition  
*D. Randy Garrison* .....47
3. Improving Quantitative Research Methods in Studies of Asynchronous Learning Networks (ALN)  
*Starr Roxanne Hiltz, J.B. Arbaugh*..... 59

## II. Cost Effectiveness

1. Linking Cost Effectiveness with Institutional Goals: Best Practices in Online Education  
*Tana Bishop* ..... 75
2. The Costs of Learner-Centered Online Learning: An Exploratory Case Study  
*Christine Geith* .....87
3. Balancing Efficiency and Effectiveness in First Year Reading and Writing  
*Gregory L. Waddoups, Gary L. Hatch, and Samantha Butterworth*..... 103

## III. Access

1. Improving Access to Online Learning: Current Issues, Practices & Directions  
*John Sener* ..... 119
2. Access Issues and the Current State of Practice at the University of Maryland University College  
*Merrily Stover* ..... 137
3. Removing Barriers to Access: Policy Initiatives to Make Distance Learning Accessible, Affordable, and Available to All Learners  
*Bruce N. Chaloux* ..... 159

## IV. Faculty Satisfaction

1. Faculty Satisfaction in the Online Teaching-Learning Environment  
*Melody M. Thompson* ..... 189

2. The IUPUI Story of Change <i>Erwin Boschmann</i> .....	213
3. Institutional Support for Online Faculty: Expanding the Model <i>Marie J. Fetzner</i> .....	229

**V. Student Satisfaction**

1. Student Satisfaction with Online Learning: An Expanding Universe <i>John Sener and Joeann Humbert</i> .....	245
2. Longitudinal Success Measures for Online Learning Students at the Rochester Institute of Technology <i>Karen Vignare</i> .....	261
3. A Preliminary Investigation of “Teaching Presence” in the SUNY Learning Network <i>Peter J. Shea, Eric E. Fredericksen, Alexandra M. Pickett, and William E. Pelz</i> .....	279

# INTRODUCTION

*Frank Mayadas*

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Sponsored by the Alfred P. Sloan Foundation and hosted by the State University of New York, the fourth annual Sloan workshop focused on the Sloan-C quality framework for online education. This September 2002 workshop convened at Lake George, New York, bringing together more than 40 invitees who are veteran practitioners and leaders in online education to review work in progress and to forecast needed developments in research and practice.

The Sloan-C quality framework has evolved with online learning, and it continues to evolve as technology enables innovations in teaching and learning for more—and more diverse—kinds of learners. Beginning in 1993 with the coining of the term “asynchronous learning networks” (ALN), the Sloan-C vision of quality is now understood as a synergy among five elements: learning effectiveness, cost effectiveness, access, faculty satisfaction and student satisfaction. These elements are known as the five pillars of quality; they are the values, principles and goals of asynchronous learning networks. ALN networks are not only technological channels; ALN emphasizes the special quality of communicative, asynchronous interactions among people. ALN is online learning that is accessible, affordable for anyone, any time, and anywhere, in a wide variety of disciplines. Thus, the quality framework is an instrument for continuous quality improvement—strategic planning with continuous feedback from all members of the institution.

Sloan-C values research and innovations that provide evidence of excellence. Channels for sharing empirical knowledge include annual volumes based on the workshops; the online, peer-reviewed *Journal of Asynchronous Networks*; the Sloan-C website, and more. To enable Sloan-C members to exchange knowledge, editors for each of the pillars gather effective practices for display at <http://www.sloan-c.org/effectivepractices>. The editors led the 2002 workshop and presented overviews of the state of practice and challenges in online education; authors invited from ten institutions supported the overviews with perspectives from two- and four-year, public, private, and research institutions.

Karen Swan of Kent State (and formerly, of the SUNY University at Albany) and Sloan-C editor led the discussions of learning effectiveness. Roxanne Hiltz of the New Jersey Institute of Technology (NJIT) and the Learning Networks Effectiveness Research Web Center and Randy Garrison of the University of Calgary provided supporting perspectives. According to Swan, research demonstrates that outcomes from online learning are at least as good as face-to-face learning outcomes. Online communities of inquiry are characterized by “social presence”—the perception of immediacy that reduces perceived psychological distance. Social presence results from interaction with peers, with teachers, with content, with interface, and with witness learning. Witness learning, also known as vicarious learning, is interaction that occurs when people learn by observing interaction among others.

Swan cites studies that demonstrate how online communities develop trust and engagement, leading to measurably higher levels of learning. We know online learning is effective, says Swan, “What we need to know is what makes it good, and how can we make it better?”

- Roxanne Hiltz of NJIT addresses this question in her survey of the research designs that measure learning with a variety of indicators. While most studies examine a single course or a single program, Hiltz proposes that more a generalizable, theoretical model will enable multi-course, multi-institutional, multi-national, performance and archival based, longitudinal research. This kind of context-based research will discover more exactly what is most effective about asynchronous learning, and thus spur continuous improvement.
- Randy Garrison of Calgary University finds online learning “uniquely suited to create a cognitive presence for higher order learning.” In online communities of inquiry, the climate of social presence is enhanced by teaching presence that creates structure and process in the group; teaching presence and social presence create cognitive presence, the selection of content and discourse uniquely suited to the community. Teaching presence is “conceptually rich, coherently organized, and persistently exploratory.” This online model of presence goes beyond some traditional models for classroom learning; online learning better enables reflection and collaboration, as it helps bring learners’ attention not only to what we learn but how we learn. Thus Garrison advises going beyond traditional models. “Start with the big ideas, start with the learning outcomes,” says Garrison; this enables learners to construct content and take advantage of the “multiplicative properties of communicative freedom, information access, and individual control of time and space.”

Melody Thompson, Director of Quality and Planning at the Pennsylvania State University World Campus and Sloan-C editor, led the discussions of faculty satisfaction. Marie Fetzner of Monroe Community College (MCC) and Erv Boschmann of Indiana University Purdue University Indianapolis (IUPUI) provided supporting perspectives. According to Thompson, faculty satisfaction means concentrating on making teaching online a satisfying experience for faculty by providing access to new student populations; training and technical support; policies, including intellectual property, that include recognition and reward; and opportunities for professional development, research, and publication. Thompson shows that these provisions help faculty “feel positive about what they do and to do their jobs well.”

- An initial difficulty for faculty is the increased time it takes to develop and conduct online courses. Marie Fetzner reports on Monroe Community College’s organizational model that is designed to lighten faculty’s administrative burden. A support team helps faculty concentrate on teaching and provides help for managing large discussions and providing timely feedback. The team is designed to emulate the structure of an online problem solving community—“team-based, collaborative, comprehensive, action-oriented and non-hierarchical in nature.” The replicable model shares some resources centrally with SUNY, such as a faculty guidebook and support, technical infrastructure with a consistent template for learner interface, and operational and administrative support. Locally, team members help faculty schedule training, design courses, and obtain library and technical support; the team also acts as the liaison and advocate for students with support services.
- Erv Boschmann reports on the incentives that IUPUI provides for promotion and tenure. At IUPUI, faculty satisfaction is an institutional focus that recognizes that advances in information and

instructional technology are an important facet of scholarship. Annual surveys of faculty contribute to policies that include internal and external peer review, personal statements of teaching philosophy, student advising, professional service and collegiality, and sound pedagogical procedures for course development and refinement. Continuous institutional responsiveness to the pace of change leads IUPUI to ask: “What will technology *not* be used for?”

Tana Bishop, of the University of Maryland University College and Sloan-C editor, led the discussions about cost effectiveness. Chris Geith of Michigan State University (MSU) and Greg Waddoups of Brigham Young University (BYU) provide supporting perspectives. The goal of cost effectiveness means institutional commitment to improving learning while reducing costs to the institution and to students. According to Bishop, now that we know that online learning results in significant, positive outcomes, institutions need to learn better how to leverage the technological resources, particularly in curriculum and course design, student access and support, library and IT, and consortia and partnerships. Creating frameworks for analyzing costs, identifying distinctive and key institutional goals, and linking course outcomes with costs help institutions meet their respective missions. In fact, Bishop says, asynchronous learning networks are an opportunity for leadership in higher education. Robert Ubell of the Stevens Institute commented that ample opportunities for return on investment are real because online programs eliminate infrastructure costs associated with campus instruction: “the four *Ps*, pizza, pillows, parking, and pool.” Cost effectiveness is a ratio of value divided by expense, as defined by institutional context and purpose.

- Chris Geith describes how MSU’s Global Connection links learner-centered customized online program with costs in the initial stages of planning. To create learner-centered rather than teacher-centered curricula, MSU focuses on self-directed, student control of learning purpose, content as a means to knowledge, teachers as facilitators, and evaluation as a means for learning. Choosing appropriate pedagogies for corporate training and higher education significantly impacts how effectively faculty and students spend time, how many media are developed, and how technology supports learning.
- Greg Waddoups of BYU illustrates how the design of a basic reading and writing course at BYU improves learning outcomes and convenience for students *at the same time* it significantly reduces instructor time traditionally spent on preparation, instruction, grading, office hours, email, conferencing, and course development. Noting that student writing is better in the online courses, Waddoups identifies a delicate balance among learning effectiveness, cost effectiveness, and student satisfaction, concluding that “systematic course redesign, including the integration of technology, can create efficiencies.”

Joann Humbert, of the Rochester Institute of Technology (RIT) and Sloan-C editor, led the discussions of student satisfaction. Eric Fredericksen and Peter Shea of the State University of New York Student Learning Network (SLN) and Karen Vignare of RIT provide supporting perspectives. Humbert pointed out that while research demonstrates that there is a great deal of satisfaction with courses, levels of interaction, community and support services, it is important to continuously study student expectations to determine appropriate levels of interaction and learning community involvement. Student expectations are rising and it is essential for institutions to determine the difference between student needs and desires. Humbert calls for longitudinal studies, studies of multiple models, studies of the value of automated interactivity, studies of online student services, and studies of blended learning.

- Eric Fredericksen and Peter Shea of SLN, a program of 40000 learners and 2500 courses, and winner of the 2002 Sloan-C award for excellence, report on how SLN works within a framework that continuously examines how effective teaching and learning practices create high levels of satisfaction among students and faculty. Social presence, including building environments of trust, is critically important for success.
- Karen Vignare of RIT reports on the integration of online learners with face-to-face learners in at RIT where 25% of students enroll in online courses, resulting in an increase in RIT's graduation rates. Students report strong satisfaction with online learning. Vignare also details the process of longitudinal measurements of completion rates, retention, attrition, customer service, gender, status, and comparisons with face-to-face learning.

John Sener, consultant for the Sloan Center for OnLine Education and Sloan-C editor, led the discussions of access. Merrily Stover of the University of Maryland University College (UMUC) and Bruce Chaloux of the Southern Regional Electronic Board (SREB) provide supporting perspectives. Sener defines access as connecting learners with education anywhere by reducing barriers to courses, programs, learning and self-assessment resources, administrative and academic services, technical infrastructure and support services. Technology opens doors for more students and enables institutions to accommodate different learning needs; thus finding ways to bring greater attention to their programs becomes an institutional imperative.

- Merrily Stover reports that the University of Maryland University College has successfully launched and scaled a variety graduate and undergraduate programs for more than 87,000 enrollments in liberal arts, in business and computing, and in niche markets like fire science and legal studies. Outreach, student services, comprehensive web services, career development and student success centers, disability support, and library support for online learners are intrinsic to UMUC's commitment to ensuring "that no student is disadvantaged by his or her choice of delivery format, and that all students, wherever they are, have seamless access to the UMUC experience."
- Bruce N. Chaloux, Director of the Electronic Campus of the Southern Regional Education Board reports that "the 'digital divide' is real and growing. Differences in computer ownership and Internet access across racial, geographic, and income groups are larger in the South than the rest of the nation." In an effort to redress unequal access, SREB invites national participation in designing policies for credit transfer and articulation; for finance; for reaching the underserved; for faculty; for student services; for financial aid; and for quality assurance. "The goal of universal access through the development of an accessible and affordable ubiquitous technical infrastructure will take many years," says Chaloux; meanwhile concerted efforts at the national, regional, state and institutional levels can overcome a number of policy barriers. Policies to address pricing, access to financial aid for part-time distance learners, and more equitable, fair and just credit transfer and articulation arrangements can be addressed successfully. People "in the broader academic and policy communities will need to join forces to help make the needed changes a reality. The *hard* work is about to begin."

The purpose of the Sloan Consortium (Sloan-C) is to help learning organizations continually improve quality, scale, and breadth according to their own distinctive missions, so that education will become a part of everyday life, accessible and affordable for anyone, anywhere, at any time, in a wide variety of disciplines. You are welcome to join.

# *Elements of Quality Online Education: Practice and Direction* Edited by *John Bourne & Janet C. Moore*



Volume 4

# Elements of Quality Online Education

Practice and Direction

**Elements of Quality Online Education: Practice and Direction**, the fourth volume in the Sloan-C series on quality, provides overview on the status of online education, examples of effective practices, and directions for research and development.

The authors address these questions about quality:

- What pedagogical practices promote effective learning online?
- What are the key areas for achieving cost effective quality in online programs?
- What services enable new populations of learners to access higher education?
- What motivates faculty satisfaction in online teaching?
- What practices assure student satisfaction?

Sponsored by the Alfred P. Sloan Foundation, the Sloan Consortium (Sloan-C) is composed of institutions and organizations dedicated to continually improving quality, scale, and breadth according to their own distinctive missions, so that education will be part of everyday life, accessible and affordable for anyone, anywhere, at any time, in a wide variety of disciplines.



**The Sloan Consortium**

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