Conceiving a Learning Organization Model for Online Education

Kam Hou Vat

University of Macau, Macau

INTRODUCTION

As online technologies and information resources rise in salience, experience has shown (Vat, 2000, 2001, 2002a, 2002b) that online education must be based on theories of learning and instructional design principles to guide usage of the tools and resources for mediating collaboration and social exchanges within communities of learners (CoL). Relatively recent discussions in the literature (Cobb & Yackel, 1996; Marshall, 1996; O'Connor, 1998; Vygotsky, 1978) suggest that learning is increasingly viewed as a constructive process occurring during one's participation in and contribution to the practices of the community. This is supported by a current shift (Brown et al., 1993) from the cognitive focus on knowledge structures presumed in the mind of the individual learner, to a constructivist focus on the learner as an active participant in a social context. Indeed, we have been witnessing classroom culture being enriched with tools such as the Web-based search engines that mediate knowledge building and social exchanges among peers as participants in discourse communities (Bonk, Medury, & Reynolds, 1994; Bonk & Reynolds, 1997; Fabos & Young, 1999). These communities open opportunities for learners to interact with multiple perspectives, which challenge their existing knowledge constructions and impose cognitive conflicts (Piaget, 1952) requiring negotiations. The theme of this article is to investigate strategies to enhance learning and knowledge sharing in the learners' communities through the idea of a learning organization model. Its aim is to develop the collective intellect of the CoL through appropriate design of information system (IS) support so as to expand its capacity to adapt to future challenges.

THE IDEAL OF LEARNING ORGANIZATION

The concept of the learning organization took seed several decades ago and gained major recognition with the incredible success of Peter Senge's 1990 book *The Fifth Discipline*. Senge (1990) describes a learning organization as a place where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. At the core of Senge's formulation are five essential learning components: personal mastery, mental models, shared vision, team learning, and systems thinking, which may be briefly described as follows.

Personal mastery has to do with individual learning, and can be seen as the basic building block through the actualization of which the learning organization is typically constructed. Mental models are about how individuals reflect on their own knowledge, using such models to improve the internal understanding of an organization's functions and processes. Shared vision implies a sense of group commitment to a matrix of organizational goals, while team learning describes a sharing and utilization of knowledge involving collective thinking skills. The purpose of systems thinking is to understand relationships and inter-relationships, as well as the context and the forces that affect the behavior of the organization.

To learner-centered teachers, it is not difficult to perceive that the learning organization model somewhat represents an educational context through which students can learn by dealing with others, exchanging ideas, and comparing our ideas with other people. In fact, Vygotsky's theory (1978) suggests that we learn first through person-to-person interactions and then individually through the internalization process that leads to deep understanding. This belief in the social process of knowledge sharing is based on people's mutual understanding of their own and others' interests and purposes, and the recognition that their interests are somehow bound up in doing something to which they all contribute. Indeed, at one time or another, we might have experienced being a member of a great team. We probably remember the trust, the relationships, the acceptance, the synergy, and the results that we achieved as a group of individuals. Though it takes time to develop the knowledge of working as a whole, when a group of people who over time have learned to enhance their capacity to create what they truly desire to create, this is, in fact, an instance of a learning organization.

THE EDUCATION PHILOSOPHY FOR ONLINE LEARNING

In realizing the learning organization ideal of providing educational services, it is observed that there has been a major shift from the linear view to a dynamic view of managing education (Bates, 1995; Berreman, 1997). The first challenge for educators is to figure out how to harness the power of the new media to take advantage of its capacity to support flexibility, concurrency, and just-in-time design, instead of merely using the new media to deliver the same old stuff. In the linear model of education, learning design proceeded in a linear fashion from defining objectives to lesson planning to course delivery. Educators first engaged in a comprehensive learning needs analysis process, often based on assessments done by others about competencies and learning objectives. Comprehensive syllabi were developed. Finally, the course was delivered as planned. Associated with this linear approach were a set of teaching strategies which matched its linear qualities, characterized by being predominantly one way, centralized, and broadcast oriented. When students appeared bored and unengaged in this type of program, the solution was to find ways to use new media to make the one-way broadcast more entertaining.

Much early online learning was nothing more than a way to generate a broadcast of an expert and his or her multimedia slides with good production values. Today, we need a renewed mindset for education, especially when it is offered through the Internet. Teaching and learning is currently seen as an ongoing process rather than a program with a fixed starting and ending point. The importance of widespread participation by learners in the design of their own learning has been widely recognized (Kimball, 1995). ICTs (information and communications technologies) are particularly well suited to a more dynamic approach to managing education. Good teachers have also always been open to changing their lessons plans based on student input. New media makes it easier. And online environments can provide electronic spaces for continuing conversation among students and teachers about what is working and what is not working in the process. The idea of participatory course design is not to be neglected. The online environment provides an opportunity to support collaborative learning in ways we have not been able to do before. Yet, just putting participants together in some kind of common electronic space will not turn them into a collaborative group automatically. The key is to design a framework for group work, which requires the team to grapple with roles, protocols for working inter-dependently, and mutual accountability.

THE APPRECIATIVE SETTINGS FOR KNOWLEDGE SHARING

In selecting the pedagogical devices to support knowledge sharing according to the learning organization model, we have borrowed some legacies from some educational visionaries in trying to blend the art and science of constructivist teaching. For example, John Dewey's designs embedded learning in experience (Dewey, 1938). He advocated field studies and immersion in experiences to stimulate learning. Jean Piaget's work influences constructivist educators through designs of discovery learning (Piaget, 1970). Students manipulate subject matter and objects representing the subject matter as they interpret their findings. Piaget believed that learners' internalization leads to structural changes in how they think about something as they assimilate incoming data. Today, constructing meaning on the basis of one's interpretation of data is indeed the heart of science inquiry. Besides, Feuerstein's (1980) mediated learning theory refutes the concept of an unchanging intelligent quotient and leads to intense examination of how the classroom setting affects students' meta-cognition. On examining the varied work of these master architects, we see an array of constructivist settings to enable knowledge sharing.

5 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: www.igi-global.com/chapter/conceiving-learning-organization-modelonline/11786

Related Content

Digital Natives and Digital Immigrants: A Study of Information Technology and Information Systems (IT/IS) Usage between Students and Faculty of Nigerian Universities

Nwachukwu Prince Ololube, Peter James Kpolovie, Samuel Amaele, Rose N. Amanchukwuand Teinye Briggs (2013). *International Journal of Information and Communication Technology Education (pp. 42-64).* www.irma-international.org/article/digital-natives-and-digital-immigrants/83599

Examining Emergency Remote Teaching Using the Community of Inquiry Framework: Lecturer Experiences in a Kenyan University

Jane Adhiambo Chiroma, Lawrence Medaand Zayd Waghid (2021). *International Journal of Information and Communication Technology Education (pp. 1-16).* www.irma-international.org/article/examining-emergency-remote-teaching-using-the-community-of-inquiry-framework/284583

Promoting Partnership Themes Among Elementary School Stakeholders

Martha Ann Davis McGaw (2022). Handbook of Research on Adapting Remote Learning Practices for Early Childhood and Elementary School Classrooms (pp. 423-441). www.irma-international.org/chapter/promoting-partnership-themes-among-elementary-school-stakeholders/297473

Tablet PCs as Online Learning Tools

Malu Roldan (2005). *Encyclopedia of Distance Learning (pp. 1740-1745).* www.irma-international.org/chapter/tablet-pcs-online-learning-tools/12341

Evaluating Educational Technologies: Historical Milestones

Laurie Ruberg, Manetta Calingerand Bruce C. Howard (2010). *ICTs for Modern Educational and Instructional Advancement: New Approaches to Teaching (pp. 285-297).* www.irma-international.org/chapter/evaluating-educational-technologies/38407