



The Digital Culture and Communication: More than just Classroom Learning

Kristen Snyder

Associate Professor
Mid Sweden University
Email: Kristen.Snyder@miun.se

Abstract

This paper presents a conceptual model of the digital culture that reflects the multi-dimensionality of ICT in education: pedagogy, communication, technology and organizational systems. The model grew out of a three-year study of an online professional development program for educators in seven countries. The focus of the paper is to explore the relationship between human dynamics and technological systems for advancing the school as an organization. Considering the digital culture of schools from an organizational communication culture perspective awakens us to the importance of looking at the subculture that emerges through human exchange reflecting core values and beliefs. When we consider the digital world in which students already live, and match it against the challenge of schools for human citizen development, we begin to see that a digital culture is more than technological. It is organizational, it is communicative, and it is cultural. Through the creation of cultural webs, motivated by humans, and assisted by technology, online communication has the possibility to shape a collective space for cross cultural connections that support a shared democracy.

Introduction

Educators today are working hard to develop capacities to integrate technology and learning, which emphasize areas including technology, pedagogy, human communication, and teaching strategies. Such efforts are now opening doors beyond the classroom to create virtual communities for life long learning and professional development. We see this in a variety of projects and programs that provide such things as online discussion groups and cross-cultural school development. One of the growing challenges with this expanded use of ICT is the emerging dimensionality of integrating technology into the daily fabric of life long learning. We are no longer talking just about course development to serve individual learning. Today, ICT is being used to connect people and organizations across cultures to promote, among other things, democracy through professional and educational development. This shift from the classroom to open learning spaces adds new dimensions to the development, use and integration of technology in education and professional development.

The research on ICT and education has highlighted exemplary courses, as well as the challenges of developing online learning. Many pedagogical researchers espouse the importance of more community-oriented theories of teaching and

learning (Harasim, 1989; Sorensen and Takle, 2002), while the methodologists focus on ways to structure online learning activities (Paloff and Pratt, 1999; Salmon 2000, Simpson, 1999). While these studies have helped to advance the development of technology and learning, most examine a single dimension in relation to online classroom learning, for example, pedagogy, teaching methods, or the technical use of communication tools. Fewer focus on the multi-dimensionality of online communities and the challenges for development and organizational change that accompany this growing life long learning environment.

This paper focuses on the development of a model that reflects the multi-dimensionality of ICT in education today, integrating pedagogy, technology, communication and organizational culture. The initial model, presented in figure 1 grew out of a research study on professional development online. Subsequent to the studies completion, the world of ICT continued to develop, influencing our daily organizational culture and work routines, as well as the delivery of professional development and life long learning programs. Figure 2 presents a developed version of the initial model reflecting an emerging digital culture in which we now live, work and grow.

The study site included 60 educators from seven countries, and an initial teacher-leadership staff of 12 persons from three countries, and two universities (Snyder and Acker-Hocevar, 2004; Snyder and Wagenius 2002). The professional development program provided training in global school and leadership development to principals and school staff. The early stages of program development focused on several dimensions including, program content, learning community organization, and instructional design. Following this, pedagogical theory and models for group structure and facilitation were added. The second and third years were spent developing the online communication and social community. Each phase of the development emerged in response to the needs of the participants, program leaders, and project goals. The building blocks of these years of virtual living provided a platform to examine and explore the multi-dimensionality of online connections and communication; a powerful tool to open learning beyond the classroom.

Framing Thoughts Behind the Model

For a number of years my research was influenced heavily by an organizational culture perspective (Bantz, 1993; Eisenberg and Goodhall, 1993; Stohl, 1995), focusing on how groups organized, communicated and interacted within schools to facilitate work and development toward the educational goals. Such research was grounded in physical place, studying the symbols and language that people used to give meaning to their work, to change, which in turn created a work culture. Using the methods, tools, and analytic frames of narrative study, symbolic interaction, and social constructivism, the studies related much to interpersonal communication and the sociology of organizing. In late 1999 I was invited to lead a research team to study leadership and school development among educators who participated in a virtually based program, called the International School Connection. My initial approaches to the study were strongly driven by my “physical placement” study orientation, which I had developed for quite some time and felt stable in. Near the end of the first year of study, I was rudely, and appropriately awakened to the fact that studying “life online” is unique and requires a different way of looking at people, communication, organization, and outcomes.

The model that is presented in this paper has emerged from a four-year journey moving from a bounded system of study orientation to seeing the world as a boundary-less set of networks, each providing their own unique combinations of culture and interaction. Simultaneously, the institutional life

around me (my own university) was developing in an era of technology and digital life, causing all of us to rethink systems of management, the delivery of courses and programs, and the day to day maintenance and engagement with email and chat as our new dominant forms of communication. The model presented in this paper reflects the journey from physical to virtual and back again, representing the circle of human dynamics and organizational development. What was once considered another field of study and dimension of working (Information Communication Technology) is now integrating with the traditions of organizational culture, creating a digital culture for human and organizational life.

Creating a Context: Technology and the age of networks

Technology has opened doors that are transforming our daily rituals with rapid speed. In the mid 1990s Castells (1996) wrote about the Network Society, which through technology, would stimulate changes in production, experience, power and culture. He argued that people would have new access to resources, and that the connections between political, social and economic structures would create a new kind of relationship between people and nations. Since that time, we have witnessed the growth of our societies and the unfolding of a digital culture, which is becoming more and more complex, reflecting in many ways the true nature of networks: complex systems. What we are in need of, as a global race, is to understand this complexity and grab hold of it, for if we don't we fail to achieve the benefits of networks posed by Castells: highly dynamic social structures, which have the ability to innovate without causing imbalance to the system.

During the past 10 years or more, innovation in technology has taken place in almost all branches of society from the micro to the macro. In education, emphasis has grown from initial thoughts of using technology in the classroom to building a digital culture for learning and living, that includes among other things "digital literacy" (European Union Decision No 2318/2003). The E-learning action plan, along with the Lisbon Council (March 2000) and other European Union initiatives for education, reflect a desire to open avenues for knowledge acquisition, provide greater access to education for all, enhance creativity through changes in the learning environment, and create an avenue to entrepreneurship, life long learning and network living. By year 2006, the E-learning plan strives to meet four primary goals: 1) promoting digital literacy, 2) building European virtual campus, 3) e-twinning of schools in Europe and promotion of teacher training, and 4) transversal actions for the promotion of e-learning in Europe. This action plan, along with others such as the Bologna process (1999) is calling for fundamental shifts in the organization and delivery of education from compulsory to professional development and life long learning.

At the school level, such initiatives are emerging that focus on the use of technology as a communication tool between home and school (Nilsson and Sefyrin, 2005); new models of high schools are developing through virtual campuses, such as Nätverksgymnasiet in Sweden for example; and regional learning centers are providing support to compulsory, university, and life long learning. Many universities in Sweden are now preparing to restructure the teacher training program to prepare becoming teachers with a digital competence befitting the needs of students and schools today (KK Stiftelsen, 2005). Moreover the success of distance education at the university level has led to the sustainability and growth of virtual universities, as well as raising the bar on what it takes to stay competitive in the distance education game of higher education.

These examples alone reflect a complex array of factors that are transforming not only pedagogical models but also educational infrastructures. For the past

decade or more we as global citizens have witnessed the downsizing of companies in big industry, which resulted, in large part, from the technologization of the workplace. Fewer people were needed for jobs, and instead replaced by automated processes. This shift led to the demise of the production worker and the rise of the knowledge worker. A similar shift of its own kind is now being witnessed in education as the “digital culture” is now changing the ways in which teachers and students connect, whole programs of study are offered, classroom are constructed and placed, and information is accessed.

However, to stop at the pedagogical level, which is how most of these changes have been classified for years, would be to sell us short of understanding the true implications of the digital culture. We need to see that the discussion on ICT once reserved for teachers, is no longer a special subject: it is our collective life of living and working. It is a multi-dimensional culture, which includes technology, pedagogy, communication, and organizational life. In the next few pages, I will present the development of a model that reflects dimensions of the digital culture, which I hope will contribute to a growing discussion about the field of IT, shifting from the narrow focus on technology or instructional design, to include organizational life.

Moving to a Digital Culture

Two figures are presented below that represent the conceptual development of a digital culture, moving from a linear orientation, focused on pedagogy, to a systemic orientation focused on the interdependence of technology, pedagogy, communication, and organizational systems.

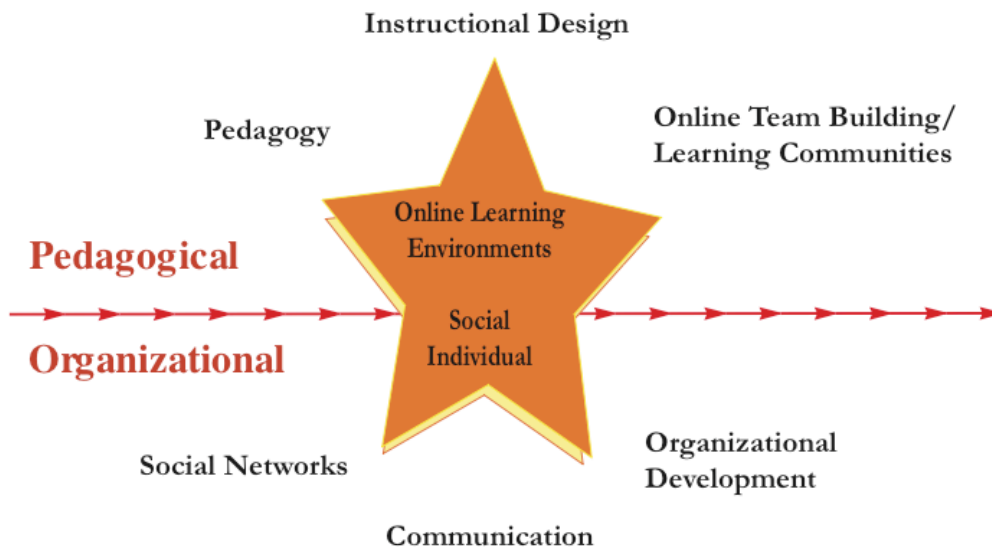


Figure 1: Elements found in Investigating ICT and Professional Development

Together these elements shape and are shaped by one another, resulting in a dynamic digital culture. The first model was conceptualized at the end of the

research study presented above. The second model was developed a year later after conducting further research on human communication and culture online from an organizational theory perspective, as well as participating in the further development of network organizations, and the use of technology in a university-based teacher training program.

Figure one depicts a polarized view of ICT in educational institutions, suggesting that there are two sides to the coin: pedagogical and organizational. In the pedagogical side, focus is given predominantly to creating online learning environments that support the acquisition of knowledge. While there are different pedagogical approaches and theories about online learning and instructional design, the primary focus remains the environment and its ability to facilitate learning. The human dimension (on the pedagogical side) is reflected mostly in online discussion groups, which are orchestrated around predetermined tasks that relate to course assignments and outcomes. Over time, the pedagogical advancements in ICT have moved from a technical focus (incorporating the computer in the classroom) to building online learning communities that support collaborative learning (Lave and Wenger, 1991; Sorensen and Tackle, 2002). It is this dimension of online learning that has opened doors to the other side of the coin: organizational.

The organizational dimension of ICT or online learning has been less articulated in the literature. While there is much discussion about “online learning communities”, the orientation is primarily pedagogical. In the above model, “organization” implies the use of online learning communities to create new organizational forms, giving structure and meaning to the network society. In this sense ICT is used to develop collaborative spaces for interacting, organizing, disseminating information, and working. The virtual space, by necessity, has an infrastructure that is maintained and developed by an organizing entity. Leadership, whether predetermined or emergent, is present, and people come together around a common purpose, given meaning (sense making), vision and goals to their work. Communication is a central ingredient to the success of the communities, and requires that people take time to form communication patterns that are meaningful and rewarding (Snyder, 2005; Wagenius and Snyder, 2002). Because organizational networks are sustained, time provides for the emergence of an online culture that is characterized by role, relationships, identity, rhetoric, and symbols of meaning. Through the communication culture, the network continues to form taking on new meaning overtime in the form of a social network (Snyder Snyder and Acker-Hocevar, 2004). Such social networks provide support in the form of resources, professional development, emotional connections and community identity.

While the online organization has all the elements of the pedagogical dimension of the model, most participants and leaders of such a virtual organization do not approach the online culture pedagogically. Rather, they approach it organizationally, considering how the technological space can facilitate connections. At other times, many people don't even consider the organizational space, but rather focus on the human connection and work at hand. More and more network organizations are developing within countries and across national borders, advancing professional development and life long learning opportunities. Moreover, these networks are impacting the ways in which work is conducted in our daily institutions, through the common use of teleconferencing, chat forms, and the like.

The advancement of ICT through pedagogy into organizational theory is creating an interesting social cultural phenomenon, which transforms human dynamics, and expands the role of online communication beyond the classroom. No longer are we living in an era where “online communication” is a separate phenomenon from our daily lives. It now permeates our organizational walls and human systems to create a digital culture, which is

reflected by the integration of technology into everyday life such that our human systems of interaction and work transpire in a physical and virtual space interchangeably.

A digital culture requires that we see the organization as a central player in the interactive exchange between human dynamics and technical systems. The organization is a human device that is facilitated by technology in order to carry out its mission. On the one hand the organization shapes the technology, giving need and use to advancement. On the other hand, it is shaped by technology since the mechanical advances happen at a more rapid rate than growth in human systems. It is the interplay between the roles of shaper and shaped that a new organizational culture emerges, which I suggest to be the digital culture. By this I do not mean to suggest a purely technological space for living and working, but rather a space in which living with and through technology gives rise to new symbols, actions, rhetoric, and systems of work that are supported and carried out through communication patterns. Such a culture transforms our daily ways of connecting, and creates spaces for organizational learning to take place on a multi-dimensional plain between the virtual and physical. Figure 2 below is a systems view of the digital culture, comprised of pedagogy, technology, communication, and organizational theories.

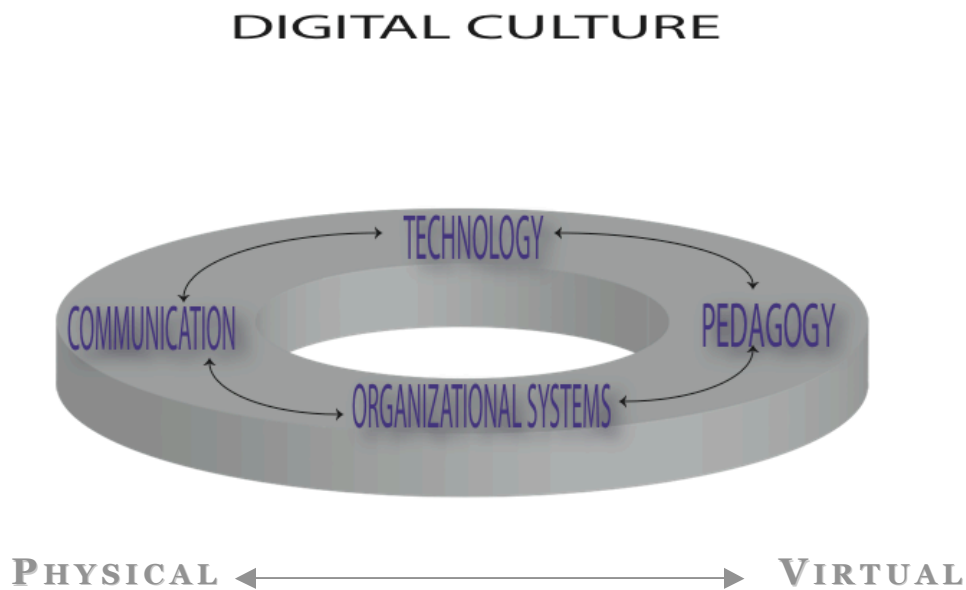


Figure 2: Digital Culture

Implications for Education

The growth of the digital culture is quite natural when we consider the notion of the network society. It is further conceivable when we consider the transformation of human systems over time. What is perhaps most difficult is to understand the rate at which the culture is emerging with such depth and complexity, and that it is no longer adults alone who are in the driver's seat. Today, youth are giving cues to adults as to how to embrace and integrate technology into the fabric of educational institutions. Yet, while the use of

technology is promising it also brings with it a moral challenge to schools develop the use of technology within a collective culture based on shared values and human rights.

Schools are pressed today (not yet governed) to serve as a primary mechanism for promoting lifelong learning, active citizenship, and networking among its youth to stimulate healthy community development in future generations (Cresson, 2002). The commission on International Education states that “while education is an ongoing process of improving knowledge and skills, it is also—perhaps primarily—and exceptional means of bringing about personal development and building relationships among individual groups and nations (Delors, 1996; p. 14). Through education, we as a global community have the opportunity to work with people of all cultures to insure that as we move to a market oriented focus on life, we do not lose a sense of connection to community and cultural heritage, nor lose our moral, social and family values. For the children of the future, it is essential to keep these core components of life at the forefront of their human development. Failure to do so will result in a future lacking in humanitarian value and sense of community connectedness.

As organizations schools need to move beyond ICT for classroom learning to build a culture that supports learning with and through technology; that is reflected in the very fabric and culture of life inside the school. Bantz (1993) writes about a view of organizations from a communication culture perspective. He argues that by focusing on communication culture “we are looking at a specific genre of interdependent social activity: organizing” (p. 18). Through the organizing of people around a common purpose, creation, maintenance and transformation of meanings and expectations develop through communication. This is necessarily a collective process that results in behaviors and messages that give rise to culture. Embedded in the culture, are among other things a set of values and symbols.

Considering the digital culture of schools from an organizational communication culture perspective awakens us to the importance of looking at the subculture that emerges through human exchange reflecting core values and beliefs. When we consider the digital world in which students already live, and match it against the challenge of schools for human citizen development, we begin to see that a digital culture is more than technological. It is organizational, it is communicative, and it is cultural. Through the creation of cultural webs (Geertz, 1973), motivated by humans, and assisted by technology, online communication has the possibility to shape a collective space for cross cultural connections that support a shared democracy.

As schools begin to consider their role in the development of the future, they need to understand the implications of technology as more than just classroom learning. It is a strand in the web of life that gives shape to our connections and communication, through which we create shared meaning globally and locally. Creating a digital culture takes time, awareness, and care to embrace and shape the interaction between technology and human systems. Our need as a society has arrived to recognize that educational institutions and their workers need to understand living in a digital culture. This requires seeing the complexity of the global age, as well as the interconnectedness of life through technology, which is built on communication, technology, pedagogy, and organizational systems.

References

- Bantz, C. R. (1993) *Understanding organizations: Interpreting organizational communication cultures*. Columbia, SC: University of South Carolina Press
- Bologna Process Declaration (1999) Joint declaration of the European Ministers of Education (www document)
http://europa.eu.int/comm/education/policies/educ/bologna/bologna_en.html
- Castells, M. (1996) *The rise of the network society*. Oxford: Blackwell Publishers
- Cresson, E. (2002) Learning for active citizenship. A report to the European Commission on Education. 2002-02-08 (www document)
www.europea.eu.int/comm/education/citizen/citizen.html
- Delors, et al. (1996). *Learning the treasure within: Report to UNESCO of the International Commission for Education in the 21st Century*. Paris: UNESCO Publishing.
- E Learning Programme (2003) Decision No 2318/2003/EC of the European Parliament and of the Council of 5 December 2003 adopting a multiannual programme (2004 to 2006) for the effective integration of information and communication technologies (ICT) in education and training systems in Europe (eLearning Programme). (www document)
http://europa.eu.int/comm/education/programmes/elearning/programme_en.html
- Eisenberg, E. M., Goodhall, H. L. (1993) *Organizational communication: Balancing the creativity and constraint*. New York: St. Martin's Press.
- Geertz, C. (1973) *The interpretation of cultures*. Basic Books: A division of HarperCollins Publishers.
- Harasim, L. (1989) "Online Education: A New Domain", in Mason, R., & Kaye, A. (eds), *Mindweave: Communication, Computers and Distance Education*. Oxford, Pergamon Press.
- KK Stiftelsen (2005) IT I Lärarutbildningen (www document)
<http://www.kollegiet.com/default.asp/pid=142896/typ=87/docID=169678/PreviousPid=142896/skola.htm>
- Lave and Wenger, 1991 *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Nilsson, O., and Sefyrin, J. (2005) Vardagskommunkation skola-hem: *Delrapport1: föräldrars uppfattningar-nuläge och vision*. Rapport 2005:2 Sundsvall, Sweden: Sundsvalls Kommun Barn-och Utbildning.
- Paloff, R. M., and Pratt, K. (1999) *Building learning communities in cyberspace: Effective strategies for the online classroom*. San Francisco: Jossey-Bass.
- Salmon, G. (2000) *Emoderating: The key to teaching and learning online*. London: Kogan-page.
- Simpson, O. (1999) *Supporting students in online, open and distance learning*. London: Kogan-page.
- Snyder, K. M. (in press) Stimulating dialogue online in cross cultural learning communities, in F. Kochran, J. Pascelli (eds), *Technological Aspects of Mentoring*. Greenwich, CT: Infomage Press.
- Snyder, K. M., Acker-Hocevar, M. (2004) Building international cultures of synergy through online social networks. In F. Kochran, J. Pascelli (eds), *Global perspectives on Mentoring: Transforming Contexts, Communities, and Cultures*. Greenwich, CT: Infomage Press
- Snyder, K. M., Wagenius, M. (2002) International connections through ICT: Expanding the training and development of teachers. In J. Perhoff (ed) *Internationalization in a shrinking world*. Eisenstadt, Germany: Stiftung Pädagoische Akademie.

- Sorensen, E. K. & Takle, E. S. (2002): "Collaborative Knowledge Building in Web-based Learning: Assessing the Quality of Dialogue". In: *The International Journal on E-Learning (IJEL)*. Vol. 1, Issue: 1, 2002
- Sthol, C. (1995) *Organizational communication: Connectedness in action*. Thousand Oaks: Sage Publication.
- Wagenius, M. , Snyder, K. M. (2002) Building international education networks with ICT: Possibilities and challenges. In J. Perhoff (ed) *Internationalization in a shrinking world*. Eisenstadt, Germany: Stiftung Pädagoische Akademie.