

Changing Trends in Culture and Learning: Its Impact on Cognition

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Abstract: This paper explores the impact of emerging technology on cultural and social aspects of human cognition. Authors argue that internalized cultural values could influence technology appropriation and could explain differences in cognition and human behavior. Authors propose the question whether the advancement of technology has enabled learners learn faster and more effectively by having opportunities to connect ideas to other ideas and grounding them more richly (*Siemens, 2006*). The authors analyze learning with rich media (images, audio clips, video clips, and specific self-directed learning objects) and explore whether such multisensory learning engagement is deeper and is founded on learners' differing cultural approaches to learning considering real cases. Linguistic, social, geographical factors as well as deep cultural values and traditions are examined to make the argument that designing interactive, multicultural and multidimensional learning environments pose new challenges to educators, educational technologists and researchers.

Introduction

Socio-cultural research has shown that while culture is patterned it is far from being uniformed because it is experienced in local, face-to-face interactions that are locally defined (Salomon, 1997). It is argued that part of one's cultural knowledge is knowledge about the extent to which others are likely to share one's knowledge and cognitive perspective (Salomon, 1997). In other words, while culture can be defined as what is internalized by an individual it is also conceptualized as a collection of shared meaning by a social group (socially distributed cognition). In sum, culture is socially distributed, variably internalized, and embodied in external forms (Strauss & Quinn, 1997). In order to understand how and in what ways internalized cultural values could influence technology appropriation and could explain differences in cognition and human behavior, this section uses a socio-cultural perspective to analyze the impact of emerging technology on human cognition.

The rise of the Internet and associated emerging technologies has important socio-cultural implications for learning and cognition. While ubiquitous and wireless technologies are developed to enable new ways of learning, thinking and working, to facilitate coordination, they may interfere with established ways of practices; undermine achievements and individuals' styles. These issues, however, are rarely addressed in development and research projects for the use of technology in learning and assessment. We are interested in research that addresses a wide range of social, cultural and technological issues, such as institutional flexibility, organizational alignment, roles of teachers and students, practices and strategies and power and control.

This symposium will provide an opportunity to explore the effect and value of socio-cultural aspects of emerging technologies in formal, informal and workplace learning. The symposium will provide a forum for discussion of design, development and research approaches to identify critical issues associated with changing trend in culture and learning. Furthermore we would like to build a bridge between the various research communities exploring institutional, organizational, social and cultural aspects of the emerging tools and technologies. A multitude of methods and guidelines (e.g. media studies, participatory design, work place studies, curriculum design, socio-technical system approach, problem-based and scenario-based design) have been developed to address organizational, human and social issues in technology design, deployment and use. However, those methods have

often not yet been adopted and tested for the emerging technologies and its effect on culture and human cognition. We encourage submissions presenting a particular design method to address social, cultural and organizational perspectives or relating experiences from modeling these processes within research and development projects.

The use of social software is emerging as a powerful force for reshaping institutional, organizational and social realities, potentially affecting the ways we learn and work. We welcome especially attempts to gauge the wider implications of these developments on society and culture that then in turn have an impact on institutions and workplaces. We not only want to consider the impact of emerging technologies but rather understand those technologies and the surrounding cultural and social logics in a co-constitutive process as Huang & Den (2008) concluded that the cultural characteristics of a society should be a key issue in developing interaction designs.

Scope

We welcome contributions that investigate the emerging technologies and rich media from a technical, organizational, cultural and social perspective from areas such as organizational studies, science and technology studies, cognitive and socio-cognitive studies, socio-linguistic studies, anthropology and human computer interaction. We are especially interested in chapters by practitioners, technologists, designers and social scientists and contributions that are interdisciplinary.

Chapters on the following topics are welcome:

- Analytical and conceptual frameworks for the changing trend in learning and culture and its impact on human cognition.
- Organizational drivers and issues of technology use in learning.
- Adoption and use of technologies in organizations (education & workplace)
- Real world case studies of technology applications in organizations (education & workplace)
- Technology as a socio-technical system
- The alignment of the emerging technologies to workplace realities
- Design methods and processes that address organizational, cultural and social issues
- Methods that address how to manage opportunities and risks associated with the use of technology in learning.
- People's perception of and discourse about the impact of technological developments and adoption.
- Discussion on use of social software for learning its risks and advantages

References

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