Chapter 38
A Model of Cultural Competence in Open Source Systems

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ABSTRACT

Open source software and the open source movement have changed how users access the Internet and produced equality of access for the global community. Despite the access to free software and code sharing for the public and corporate users, open source users remain unaware of cultural competency standards for all its users and designers. The research on cultural competence is conspicuously absent. This chapter defines open source cultural competence as an ethical and equity imperative for open source systems and the communities served by this free, accessible software. A theoretical framework for integrating cultural competence into open source technology is presented, one that emphasizes cultural competency best practices. Future implications for integrating cultural competence into open source technology are highlighted.

INTRODUCTION

Open source software (OSS) and the open access movements have changed the playing field for Internet open source software design, and web-based technology since 1998. Open source software is defined simply as software that is available for downloading from the Internet for free (Quint-Rapoport, 2010). Open source software, or OSS, refers to groups of programs that allow the free use of the software and further the code sharing for the public in general and for corporate users of the software (Choi, Kim, & Yu, 2009).

Despite its dynamic and innovative approaches, open source technology has failed to define guidelines or standards for cultural competence in open source software. Moreover, the research literature regarding cultural competency for those who use, design, and write source code for this technology is virtually nonexistent. While open access advocates have noted potential benefits for developing nations (Cockerill & Knols, 2008; Chan & Costa, 2005), there remains skepticism about the long-range benefits of open source software's for developing nations and underrepresented groups.

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Now is the ideal time for OSS users, global communities, developers, and source code writers to tackle cultural competency and embrace these competencies openly and honestly. For these reasons, and still others yet to be invented, open source professionals and university faculty must blog and dialogue together to discuss cultural competency within open source systems.

The purpose of this chapter is to define and articulate cultural competency within open source systems. The cultural communication and technical skills, awareness, and content knowledge that users and designers must have in order to practice in a culturally competent manner are identified within an ethical practice framework.

Cultural Competence

Cultural competence is a complex, psychosocial and socio-cultural process of cultural awareness, content knowledge, and applied or practice skills. It is as an active, developmental, and ongoing process, one that is aspirational rather than achieved (Sue & Sue (2008). While psychologists and other social scientists have examined the role of these socio-cultural variables for more than forty years, few have considered their impact on the ways that humans interface with, make sense of, and benefit from web-based technologies including the Internet, YouTube, Face book, and open source software. Multicultural researchers and theorists never envisioned cultural competence defined outside the context of human-to-human interface, and they never conceived of an ethical standard of competence within the reality of a virtual world as experienced through an Avatar. So, this notion of cultural competence between humans and their technology is new, novel, and [likely] controversial.

Sue and Torino (2005) defined cultural competence within a counseling context as:

Cultural competence is the ability to engage in actions or create conditions that maximize the optimal development of client and client systems. Multicultural counseling competence is defined as the counselor's acquisition of awareness, knowledge, and skills needed to function effectively in a pluralistic democratic society (ability to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds), and on an organizational/societal level, advocating effectively to develop new theories, practices, policies and organizational structures that are more responsive to all groups (p. 17-18).

The culturally competent professional works toward achieving several primary goals. First, a culturally competent professional is aware of his/her own personal assumptions about human behavior, values, biases, preconceptions, personal limitations, and so forth. Second, the culturally competent professional is one who actively attempts to understand the worldview, values, and assumptions about human behavior. Third, a culturally competent helping professional is one who is in the process of accurately developing and practicing appropriate relevant, and sensitive interventions (Sue, Arrendondo, & McDavis, 1992).

These goals make it clear that cultural competence is an active, developmental, and ongoing process of change. Counseling and mental health professions have articulated the attributes, awareness, skills, and behavioral changes necessary to effect cultural competence in three broadly defined areas:

1. Awareness,
2. Competence knowledge, and
3. Skills, behaviors or actions (D.W. Sue, 1992; D. W. Sue et. al. (1998).