Title of Dissertation: Determining success in online academic and health communities: Developing usability and sociability heuristics

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The purpose of this study is to derive usability and sociability heuristics for evaluating success in online communities, in order to formulate a definition of success from the participants’ perspectives. In addition, the researcher aims to adapt, test, and validate well-known usability heuristics (Nielsen, 1994; Shneiderman, 1998), and to refine and validate proposed sociability heuristics (Preece, 2001b).

The goals of the study are to: i) validate existing usability and sociability heuristics for evaluating success in online education and health communities, ii) derive usability and sociability heuristics from the perspectives of the participants, iii) validate the newly derived heuristics, iv) formulate a definition of success in education and health online communities, v) transform the validated heuristics into guidelines for evaluating success by designers, managers, moderators, and users.

The study has two phases. In Phase One, an action research approach is used as the main methodology to evaluate an online education community. In Phase Two, the results of Phase One are iteratively tested on two online education and three health communities for validation. Cluster analysis is used to validate the list of heuristics drawn from the research.
The results of the study show that members of all the online communities tested need:

- to feel connected to others in the group.
- policies that are prominently displayed, enforced, and clear.
- the community's purpose to be clearly stated, relevant to members' lives, and well focused.
- to have a social presence and feel a sense of belonging.
- feedback from other members.
- to feel that moderators should be active in keeping discussions civil and in keeping out flaming.
- privacy of personal information.

In addition, members of a health community need:

- empathy, support, and their medical records to be protected.

From the analyses, sets of guidelines are derived so that designers, community managers, moderators, and participants can help ensure that online communities satisfy these needs.