Chapter V
Large-Scale Interaction Strategies for Asynchronous Online Discussion

Paul Giguere
Tufts University, USA

Scott W. Formica
Social Science Research and Evaluation, Inc., USA

Wayne M. Harding
Social Science Research and Evaluation, Inc., USA

Michele R. Cummins
Social Science Research and Evaluation, Inc., USA

ABSTRACT

Designing online trainings or courses for large numbers of participants can be challenging for instructors and facilitators. Online learning environments need to be structured in a way that preserves actual or perceived levels of interaction, participant perceptions of value and utility, and achievement of the learning objectives. This chapter describes five large-scale interaction strategies that offer guidance for addressing some of these online instructional design issues. Evaluation data are presented in support of two of the strategies, and recommendations are provided about how future research in this area might be conducted.
CHAPTER OBJECTIVES

The reader will:

• Explore the relationship between levels of interaction and the number of participants in an online learning environment
• Learn about five strategies for organizing discussion areas in online learning environments
• Examine evaluation findings from the real-world application of two of the five large-scale interaction strategies presented
• Understand areas for future research on the strategies and issues presented.

INTRODUCTION

This chapter describes five large-scale interaction strategies that, if used properly, can help minimize the potentially detrimental effects of increasing the number of participants in a Web-based training course beyond what research and the wisdom of practice suggest is the maximum threshold. Evaluation findings from seven Web-based professional development trainings for adult learners provide preliminary evidence in support of two of these strategies. The outcome variables under study were participants’ satisfaction with the training, willingness to recommend the training to their peers, satisfaction with the facilitator, and perceived utility of the training. The central hypothesis was that the use of these strategies in Web-based trainings that served large numbers of participants would preserve participant outcomes that the literature suggests are only associated with a small number of participants. The chapter closes with recommendations about how future research on large-scale interaction strategies might be conducted.

There is a large body of research on the role and importance of interaction between instructors and learners in both academic and non-academic settings. In a recent study examining the effects of participant-instructor interaction in a higher education setting, Kuh and Hu (2001) found that participants place a high value on interaction with the instructor. Another study by King and Doerfert (1996) found that interaction is a key factor in participants’ learning satisfaction, and it assists in deterring attrition or dropout. It is logical to assume that any threats to the nature and level of interaction in an online educational setting will result in lower levels of participant satisfaction, lower levels of participant performance, and/or lower levels of participant retention. But, what constitutes the optimal number of participants to ensure a high level of interaction, and how can instructors and educators maintain a high level of interaction when the number of participants exceeds this threshold? The large-scale interaction strategies presented in this chapter offer one solution for structuring online educational opportunities in a manner that either preserves the small-group atmosphere and/or allows participants to engage the instructor/educator at a level that meets their individual needs.

Our current understanding of what constitutes the optimal number of participants or students in a Web-based training course is based largely on anecdotal evidence and non-rigorous studies. As noted by Simonson (2004), there is still a paucity of research on the relationship between the number of participants in Web-based trainings courses and the associated outcomes. The focus of most outcome studies to date have been on demonstrating the extent to which Web-based trainings can produce outcomes that are commensurate with face-to-face training and educational approaches. In contrast, little has been done to test empirically how outcomes might vary with characteristics of the training course, such as the number of participants and the pedagogical approach or strategy utilized. Even rarer are studies examining participant perceptions of the value and utility of the courses as opposed to outcome-based models focusing on increases in knowledge, behaviors, and academic gains.
Related Content

Developing a Framework for the Effective Use of Learning Analytics: A UK Perspective
www.igi-global.com/chapter/developing-a-framework-for-the-effective-use-of-learning-analytics/183517?camid=4v1a

Integration of E-Learning into Curriculum Delivery at University Level in South Africa
Rabelani Dagada and Agnes Chigona (2013). International Journal of Online Pedagogy and Course Design (pp. 53-65).
www.igi-global.com/article/integration-learning-into-curriculum-delivery/75541?camid=4v1a

The Role of Parents for Developing Digital Literacy of 0-5 Year Olds
www.igi-global.com/chapter/the-role-of-parents-for-developing-digital-literacy-of-0-5-year-olds/207947?camid=4v1a

Mathematics Acquisition and Immigrant Children
Judi Simmons Estes and Dong Hwa Choi (2014). Cross-Cultural Considerations in the Education of Young Immigrant Learners (pp. 103-128).
www.igi-global.com/chapter/mathematics-acquisition-and-immigrant-children/91848?camid=4v1a