Chapter 9
Collaborative Image Creation

ABSTRACT

With multi-institution multi-state collaborative funding grants and consortium-based e-learning endeavors, the occurrence of collaborative image creation has become much more common-place. Even within an institution, cross-departmental or cross-college endeavors exist. This chapter addresses collaboration around digital imagery creation for e-learning, both via face-to-face (F2F) and virtual teeming. This captures some workflow practices and highlights ideas for encouraging quality builds and innovation.

CHAPTER OBJECTIVES

• Explore the steps to collaborative digital image creation
• Define face-to-face (F2F) co-located collaborative teams for creating digital imagery
• Define distributed virtual teeming for digital imagery creation
• Describe a virtual design studio and some of the technologies needed
• Emphasize the importance of verbose communications for digital imagery collaboration, design, and development
• Review cultural sensitivity in teeming
• Explore efficient workflow practices for encouraging collaborative quality image builds and innovation

INTRODUCTION

Few digital imagery creation shops are go-it-alone individualistic ventures. Rather, this work usually involves a team of individuals with differing skill sets who collaborate around the work. This is usually
necessary because mixed skill sets are required for the creation of digital imagery for learning. Digital imagery creation requires complex skills with a variety of digital hardware and software. The concepts required for the accurate representation of visuals in a field require subject matter expertise from a variety of domains. The images that are created need to be legal and accessible; they need to be ethical. They must be technologically sound and portable. They need clear metadata labels. Visuals need to be versioned for a variety of potential needs—from print to versioning for slideshows to integration with 3D immersive spaces.

Also, a wider range of users of digital imagery may provide more eyes on the work to co-evolve the quality and creativity. And lastly, the talent for executing on some of the needs for digital imagery creation may not exist in one location. This requires drawing in talent from other locations. Those who use collaborative work structures may need to make the business case for the value of collaboration (Bodenstaff, Wombacher, Reichert & Wieringa, 2007).

**COLLABORATIVE IMAGE CREATION**

Some collaborations are formal with clearly defined teams and goals; others involve informal peer-to-peer networks connected by computer mediated communications. Some are co-located teams within the same organization; others are virtual teams that may or may not be from the same organization. Collaborative work via outsourcing is another factor that has fed collaboration.

Some teams are regular work ones, with plenty of research addressing different ways that these function. Then, there are the anomalous “hot groups” that coalesce spontaneously around cutting-edge work, deliver creative results, and tend to be short-lived (Lipman-Blumen & Leavitt, 1999, pp. 11 – 13). Underlying collaborative image creation is the idea of equifinality, a principle that suggests that “an open system such as a person, team, or organization can behave and still achieve the same outcome…” (Hackman, 2002, p. 216). Yet, even given the different paths, some general phases of digital imagery capture and development may be understood to be the work of such teams.

Collaborative digital image creation for e-learning involves five general steps:

1. design,
2. planning (for execution),
3. capture and collection,
4. processing and development, and
5. deployment and archival.

These steps actualize both the digital imagery and the digital learning object (DLO) pipelines, which progress in a parallel way, as indicated in Figure 1: Collaborative E-Learning Image Creation. The design phase involves conceptualizing the digital imagery and the pedagogical design. The planning phase involves both the planning for the digital imagery capture as well as the practical instruction planning. The capture and collection phase involves the capture of the raw imagery as well as pedagogical information and artifacts that may be used with the imagery. The next step—processing and development— involves image and digital learning object (DLO) processing. Lastly, the deployment and archival phase involves user testing, live use, and the archival of the images and DLOs in a repository for e-learning purposes.