

# Group-Based Animation and Higher Education

Chris Perry  
Hampshire College  
Pixar  
perry@hampshire.edu

Cassidy Curtis  
PDI/DreamWorks  
cassidy@pdi.com

Barbara Mones  
University of Washington  
mones@cs.washington.edu

David Hunt  
Adrenium Games  
dhunt@adrenium.com

Cristin McKee  
Hampshire College  
starla30@hotmail.com

## Abstract

Group-based animation classes are scattered throughout college course catalogues worldwide. These courses promise to provide undergraduates with valuable, “real,” interdisciplinary production experience through their use of industry models of production, and yet, there has been very little public discussion about this approach to educating future animators. The goal of this panel is to engage in such a conversation with members of the SIGGRAPH community. The panel is comprised of educators, students, and industry professionals who will share their experiences gleaned from collaborative animation courses and debate various strategies for teaching them successfully.

## 1 Purpose and Premise

Traditional undergraduate film and video educators have long recognized the group-based nature of media production. It is not uncommon for beginning students to be teamed together from their first assignment to produce a collaborative piece. Animation curricula, on the other hand, often emphasize independent work. The image of student animators working alone, hunched over a table or workstation as they perfect their personal projects, is a romantic but perhaps outdated model for animation education given the obvious group-based nature of animation work in industry.

Many educators have recognized this dichotomy and have subsequently supplemented their curricula with group-based courses. David Salesin attracted the attention of the higher education community in 1998 when he invited industry experts, along with faculty from the art and music departments, to facilitate a group-based, inter-disciplinary computer animation production course at the University of Washington [Monaghan, Peter, *The Chronicle of Higher Education*, August 7, 1998]. This two-quarter class produced the film *The Art of Survival* which was shown at a number of film festivals worldwide in addition to the TechnOasis venue at SIGGRAPH 99. Buckhouse, Niemeyer, Pausch, and Mones discussed the pros and cons of designing for collaborative and interdisciplinary education as panelists at SIGGRAPH 2000. Besides these examples, however, there has been little public debate among educators about these kinds of courses or their impact on the students taking them.

This panel seeks to continue this discussion within the SIGGRAPH community. The panelists have all either taught or taken a course that required the students to produce a narrative, computer animated short film by the end of the class. Each course, however, took a unique approach to meeting this goal, answering differently the following critical questions: Who writes the story? What are the production roles and how are the students assigned to them? Is it a course for beginning or advanced students? What roles, if any, do industry professionals play in teaching the course?

In addition to discussing various strategies for teaching collaborate animation courses, the panel will also address the pedagogical implications of implementing industry models within academia. Group-based courses unquestionably provide students

with intensive learning experiences in their chosen or assigned area of production. They also introduce collaboration as a learning goal and provide students with an opportunity to work on bigger projects than they would be capable of alone. But these unique experiences may come at a cost. Where do students develop the breadth of skills they should expect to acquire while in college, and what about claims of ownership? Finally, group-based courses promise more industry-like experiences at the undergraduate level. The former students on the panel will attest to the impact, if any, that these collaborative production experiences have had on the start of their careers.

## 2 The Panelists

*Chris Perry* [moderator] is a visiting assistant professor of Computer Science and Media Arts at Hampshire College in Amherst, Massachusetts. He is on leave from Pixar Animation Studios where he has worked as both a technical director and software engineer. Prior to Pixar, Perry was employed by Rhythm & Hues Studios in Los Angeles. He holds an MS in Media Arts and Sciences from the MIT Media Lab. His previous contributions to SIGGRAPH include “Synthesizing Flames and Their Spreading” (sketch, 1994) and “Vision-Based Modeling for Production-Quality Integration of Photographic Imagery and 3D Graphics” (sketch, 1996).

Perry taught a group-based animation course for advanced students at Hampshire in the Fall of 2002. Sixteen students collaborated to produce the four-minute short *Displacement* with Perry acting as director. *Displacement* was produced as a true film: It was animated at 24fps, rendered at high resolution, and recorded to 35mm.

*Cassidy Curtis* is a character animator at PDI/DreamWorks. He has worked in many other roles at PDI, including character TD (on *Shrek*), effects animator, and look developer. Prior to that, he worked at Xaos, Inc. and R/Greenberg Associates as an effects developer and animator. He holds a BA in mathematics from Brown University.

In 1997 and 1998, Curtis taught the group-based interdisciplinary animation course founded by David Salesin at the University of Washington. The course brought together a mix of seniors and graduate students from the departments of art, computer science, music, and architecture, culminating in the short films *Whose Hat is That?* and *The Art of Survival*, which Curtis directed.

Curtis's other short films include *Brick-a-Brac* (1995), *The New Chair* (1998) and *Fishing* (look developer, 1999). His previous contributions to SIGGRAPH include “Computer-Generated Watercolor” (paper, 1997), “Loose and Sketchy Animation” (sketch, 1998) and “Non-Photorealistic Animation” (course, 1999)..

*Barbara Mones* has been working to develop innovative applications in the area of computer graphics and animation, both in academia and industry, for eighteen years. For ten years, she was a tenured Associate Professor and the Founding Director of

the Visual Information Technologies MA/MFA Program, a course of study in multimedia, computer graphics and animation at George Mason University in Fairfax, Virginia. In addition, she designed and implemented training programs in the areas of digital modeling, animation and 3D paint at DreamWorks/Pacific Data Images and Industrial Light and Magic. She has served as the Art Chair for the Education Committee, and Panels Chair for the 1997 conference and coordinated an international Student Animation Competition for the ACM SIGGRAPH organization for eighteen years. She has lectured extensively on an international level on topics related to computer graphics, animation and curriculum development and has designed and executed her own graphics and animation that have been shown in many museums and institutions worldwide, including the Smithsonian Institution and the Villa Ciani Museum in Switzerland. Her animated work has been shown in the SIGGRAPH Electronic Theater.

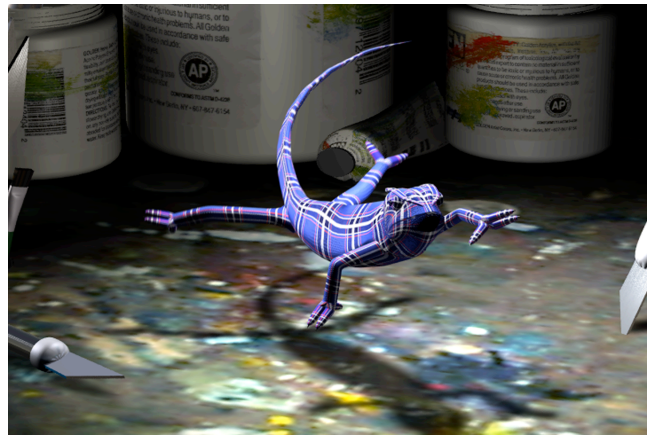
Over the past three years, Mones has taught a number of group-based animation classes at the University of Washington. Students in these courses have produced the short films entitled *Mira and the Wind*, *The Last Lift*, and *Table for Two*.

**David Hunt** graduated from the University of Washington in 2000. He works as an animator at Adrenium Games in Seattle.

**Cristin McKee** is a student at Hampshire College. She is concentrating in computer animation and was one of the three character animators who worked on the group-based student film *Displacement* in the Fall of 2002. She is currently completing her computer animated thesis film entitled *Make a Wish*.



A frame from the collaboratively-produced student film *Displacement*.



A frame from the short film *The Art of Survival*



Images from the short film *Table for Two*.