



SCHOOL OF INFORMATICS AND COMPUTING

INDIANA UNIVERSITY
Bloomington

To: Reviewers of Colin Gray's Ph.D. Dossier

From: Marty Siegel *Martin G. Siegel*
Professor of Informatics, Cognitive Science, and
Instructional Systems Technology
School of Informatics and Computing
Indiana University

Re: **Colin Gray's Involvement in Informatics Instruction**

Date: August 26, 2012

In fall 2011, and again this fall, Colin Gray was/is a mentor for my course **Interaction Design Practice (IDP), I541**. I make no distinction between a "teaching assistant" (AI) and "mentor" except the former gets a stipend and does some additional administrative duties. Nevertheless, both AIs and mentors share common responsibilities (described below).

Interaction Design Practice, a core class in the Human-Computer Interaction Design Master's Program in the School of Informatics and Computing at Indiana University, requires students to work on real-world interaction design problems under simulated conditions; they work in teams of 3-4 students and the pace is intense. Besides learning interaction design, the students learn to work collaboratively with occasional "curve balls" thrown at their teams (example: changing the project's requirements a few days before the project is due, or removing a person from the team and replacing the person with a different team member). The course emphasizes human-centered thinking: transparency, computer imagination, ease of use, appropriate use of trade-offs, and so on. The course demands a good deal of intellectual commitment from the students, as well as an ability to work effectively on collaborative teams.

The responsibilities of the AI/mentor in IDP are as follows:

1. Attend class
2. Observe group dynamics; correct problems in real time; help teams organize (agenda, schedule, etc.); teach decision protocols to resolve team conflict
3. Answer questions in appropriate ways
4. Provide critical and timely feedback on projects; recommend a grade for the project
5. Participate in the blogs
6. Provide encouragement
7. Refer problems to me before they get out of hand
8. Defend the class; help people understand IDP's rationale
9. Understand and minimize the case of the student who "poisons" the class

Among these responsibilities, mentoring teams is the most difficult and requires the mentor to guide students through complex design challenges. Often the students want to know “what to do,” and the mentor often answers questions with questions, thus guiding the students to develop their own strategies. It is a delicate balance of encouragement, holding back, and critical review (positive and negative).

On many occasions, I have observed Colin interacting with teams. He listens carefully, asks excellent questions, probes students’ thinking, and provides appropriate suggestions and encouragement. He brings his professional web development business experience to the mentoring task, teaching students how to manage their time more effectively and how to engage appropriately in soft skills of team decision making and collaboration. His quiet demeanor is both reassuring and respectful. Yet Colin is not shy about providing critical comments when necessary. End-of-semester student reviews support these observations.

When the AI/mentors get together with me to review what is “going on” among the students, Colin’s insights are good and typically lead to course corrections; it is clear that the other mentors respect his suggestions as well. For example, this year he offered new ideas about how to organize the course blog—not simply from an interaction design or aesthetic perspective, but from a pedagogical perspective. Moreover, he proceeded to build the blog in *WordPress* and he makes adjustments in its operation as we gain experience in its use.

I should add that during this past summer, Colin and I discussed IDP and some changes that we might implement. In particular, he had impact on the teaching of wire-framing skills and in the organization of the student reflections. These insights, along with his excellent mentoring skills, suggest that Colin will be an excellent teacher when he leads his own class.

Finally, last spring, 2012, Colin joined a student and me to design an online course for teaching IDP (or a similar course on interaction/experience design) to distance learners. We developed outlines, discussed curricular goals, and specified innovative ways to engage students in a projects-based course such as IDP, as well as providing timely feedback to them. We met about ten times throughout the semester, and Colin’s contributions were significant. Although we have not implemented the course, I suspect that within the next year or two we will do so, and I’m sure that Colin will be involved.

If I can provide further input to Colin’s review, do not hesitate to contact me: msiegel@indiana.edu or 812-856-1103.