Peer Observation Report
For
Greg Newby
INLS 183—Distributed Systems & Administration
February 28, 2000

Observers: Helen Tibbo and Paul Solomon

Pre-Observation Meeting: The three of us met on Wednesday, February 23, 2000 to discuss what we would be seeing in Greg’s class the next week. At that time Greg told us that he would be focusing on technical topics, primarily TCP wrappers and that this was one of the two most advanced technical classes in the SILS curriculum. He noted that the class was being held in room 117 (computer lab) because this was the only location that would support the class size at the scheduled time, not for pedagogical reasons. Greg had most graciously agreed to hold his class in this setting when the room-scheduling crisis arose last fall. Holding class in the lab when students are not using the computers for course-related work during courses time can be extremely challenging and trying. We must applaud Greg for being willing to do this and to seemingly maintain the attention of most of the students most of the time despite the lure of the computer and Internet inches from their fingertips throughout class!

During the pre-observation meeting Greg assessed the class as going “pretty well,” but that there were a couple of students who were somewhat lost and that he thought the class could have been better in a 3-hour block of time. He said that it was hard to fit in concepts, demos, and hands-on aspects within the two 1.25-hour classes each week. He noted that the students were from varied backgrounds and motivations and some had computer “performance anxiety.” He assigns them readings as necessary and does expect them to read “manual” and “how-tos” so as to be able to complete the assignments.

Greg has constructed this course in four sections: 1) fundamentals; 2) core functions; 3) specialized software; and 4) miscellaneous software such as games and chat. Software is the object of the course throughout its duration with administrative exercises given rather than exams.

Content: The session began with some ‘meta-communication’ about the class: reminders about what happened during the last session, the continuation during the current session with SENDMAIL, the topic for the day TCP-WRAPPERS, and some comments in response to student feedback. The comments on student feedback seemed useful and opened up the opportunity for more student feedback on various things including class notes. The ‘real’ content of the class involved the presentation and demonstration of key matters (pertaining to SENDMAIL and TCP-WRAPPERS) contained in class notes that are available online. Consequently, students could, if they wished, go back over the notes outside of class and gain personal experience with both items in the notes covered in class and others that extended beyond the class presentation and discussion.
As the course relates to details of the installation and maintenance of software in a Unix environment, the contents of the observed session largely focused on issues related to those details, particularly how to problem solve if an installation “bombs.” You let students know what they are likely to find, but also caution them about the likelihood of potential problem causing variations. The instructor frequently included comments about the likelihood’s and recency of changes in software and the likely frequency of upgrading. Overall this course is not about intellectual connections, but administering software and its use in a Unix environment—at the practical end of the SILS curriculum (“This course will provide practical hands-on experience with all aspects of Unix server administration in a networked environment.”). The material covered during the session fits with the framework and philosophy expressed in the course syllabus. While the details may seem overwhelming sometimes, these details must be dealt with in systems administration and a systems administration class, particularly how to problem solve when things don’t go the way they should.

**Instruction.** Greg began and ended the session by trying to provide bridges between previous and future sessions, asking for questions, offering highlights of past and future, and commenting on student feedback. (These are important things to do.) The whole of the session seemed to fit together nicely and run smoothly. As software installation and administration often takes the form of a process, the sequencing of details becomes important. At the same time, the continuing parade through such details can lead to a sort of stupor. Several times the instructor changed the pace by throwing out a question. It may be helpful to use this strategy more frequently or perhaps other strategies such as asking if there are any questions, giving students an opportunity to offer the next step or possible problem solving strategy.

**Instructor-Student Interaction:** While the instructor-student interaction was in no way negative, in retrospect there seemed to be much less than might be anticipated by the detailed nature of the presentation. There were also relatively few questions asked spontaneously by students. In part, this may be due to the foundation laid in previous classes, the readings, and the possibility that students had class notes and other online displays in front of them on the screen at their workstations. Overall, Greg kept a tight rein on the pace of the class. While this approach may be necessary/desirable to cover the necessary material, it may be that asking for questions or asking what might be done in some situation occasionally would give students a chance to challenge their understanding.

**Presentation/Style:** There were no problems in hearing the instructor despite the noise of multiple computers and the like in operation. The structure of the classroom—the lab classroom—is limiting in a number of ways: both the instructor and students are arranged awkwardly. The supplementation of the front of the room big screen display, which was partially blocked for many in the room by people and workstations in front of them, with the availability of the display on the student’s workstation was seemingly a big help to students in that they could control what they were looking at as there were multiple relevant displays at any one point in the presentation. An expression of preference and (yes) a picky point: the color of the web page displays seemed to make them both harder to read than they needed to be and added to the fatigue of looking at detail after detail.
**Student Behavior:** Students seemed attentive and engaged, though the structure of the lab with the availability of the material being covered on both the screen in front and possibly on a student’s workstation screen meant that students were not necessarily looking at the instructor. There was no evidence that students were attending to other matters (e.g., email, web surfing) besides the presentation. Most of the students were on time for the class, though a couple of students were very late and one left very early. Towards the end of the class the level of fidgeting increased noticeably. Again, the classroom arrangement is awkward and the shift from screen in front to instructor to workstation screen may be hard on eyes and body.

**General Comments:** Greg performed well in the somewhat adverse situation of the lab classroom. On the other hand, thinking of the lab classroom as positive resource, it might be a good idea to incorporate short exercises into the class that would allow students to try things out for themselves (or how would you teach this class where everyone had a laptop?). This would add more variety to the class and perhaps reduce the tedious nature of the parade of details.