Odegaard Library ALCs: Profiles of Active Learning

Introduction
For the past two years, Odegaard Library and UW Information Technology’s collaborative research team has studied the experiences of instructors and students in the Odegaard Library Active Learning Classrooms (ALCs). Results of our first year’s investigation can be read here.

In controlled studies, the University of Minnesota has found that students who are taught in ALCs have greater learning outcomes and a more positive perception of their learning experience than students taught in traditional classrooms. UMN researchers are now using the concept of “educational alliances” as a framework for their current investigations, the idea that certain types of social interactions lead to greater trust, mutual respect, cooperation and shared responsibility for learning\(^1\). While these interactions are not impossible in a traditional classroom, they appear greatly facilitated by active learning classroom designs and pedagogies.

In year two of the ALCs, the research team was interested in taking a closer look at the social interactions that happen in the ALCs and extending UMN’s research into “educational alliances.” Our goal was to better understand the nature of these interactions and how they are facilitated by the instructor, by students, by the room or technology, and how interactions in the ALC affect the quality of student learning experiences and their perceptions of themselves as learners. Year one of our study revealed that the quality of the relationships between students and instructor, students and peers, and students and material were not just a function of the room but also of active learning pedagogies adopted by instructors. While we were not able to do a controlled study, we saw year two of our research as an opportunity to look closely at select ALC courses to understand more deeply the quality of these relationships in an Active Learning Classroom setting.

Participants
We conducted our research with four instructors teaching courses in the ALCs during Winter quarter 2015. In Autumn 2014, we contacted several ALC instructors representing a range of disciplines and asked if they would be willing to share their syllabus and lesson plans for the course; allow us to observe in the classroom multiple times over the quarter; allow us to gather data from students via a group discussion or end-of-quarter survey; and discuss collected data with us (this last through an interview conducted in Spring 2015). All except one of the four instructor participants selected had taught in the ALCs the previous year; the fourth was new to the UW but had taught using active learning strategies at a previous institution. Courses ranged from 100-400-level and ranged in size from 30-56 students and from fifty minutes to one hour fifty minutes in length.

Data Collection
Observations
The Project Team research team conducted observations of participating instructors’ courses multiple times over Winter Quarter 2015. Two courses were observed intensively (5 times over the 10 weeks, including the first day of class); the two 110-minute classes were each observed twice over the quarter. The same three-member team observed each course for the full duration of class; one member consistently observed the instructor, while the other two each selected a single table of students to observe for the quarter. Observers kept detailed descriptions on the nature of the activity and the interactions between instructor and students, students and their peers, and students and the course material. Classroom maps were also used to mark the particular table being observed and indicate individuals seated at the table, any technology being used, and movement in the space. Following the end of each

class, observer teams met briefly to review their observations, clarify questions, or note a particular phenomenon the team wanted to be sure to track in subsequent classes.

*Student Survey*
We developed an eight-item survey designed to assess the relative strength of educational alliances students perceived as a result of interactions with their instructor, classmates, self (awareness of own learning) and the general classroom environment. Many of the items were modified from items on a survey developed by UMN.

*Student Focus Group*
Students in observed courses were also invited to attend a focus group during finals week to talk in more detail about their experiences in the ALC or raise issues that had not been addressed by the survey. This was also an opportunity for students to hear from peers attending other ALC courses. Food and beverages were offered as an incentive to attend.

*Instructor Interviews*
Ninety-minute interviews were scheduled with each instructor in Spring quarter 2015. Instructors responded to a set of questions asking them about their goals for the course we observed, their implementation of active learning and the interactions they believe were most instrumental to achieving their goals, and questions directly related to behaviors or events witnessed in the classroom. We also shared with each instructor a summary of the student survey data from their class and invited their responses and interpretations.

*Instructional Artifacts*
Participating instructors shared with us their course syllabi as well as additional materials (slide presentations, directions to assignments, access to electronic discussions, etc.) related to the lessons we observed. These supplementary materials provided greater context for the lessons and additional insight into the nature of interactions occurring during class.

*Analysis*
We are still analyzing the data (observations, student surveys, focus groups, and instructor interviews) in order to understand how interactions in each classroom affected the educational environment and student learning. In our process of summarizing the data, we thought it would be helpful to share what we’re calling “profiles” of each course, described below. A complete analysis and report of findings will be released later this academic year.

**Active Learning Classroom Research Profiles**
We created four profiles, drawing on all of our data, that show the Active Learning Classrooms in action. The profiles include a “day in the life” of the ALC course, drawn from our observations; the course’s pedagogical goals and challenges, as identified by the instructor in our interview; student experiences in the course, drawn from student survey and focus group findings; and overall best practices that can be applied to active learning and traditional classrooms alike.

The instructors and courses profiled include: **Biology 401: Advanced Cell Biology**, taught by Alison Crowe; **Chinese 102A: First-Year Chinese for Non-Heritage Learners**, taught by Nyan-Ping Bi; **Comparative Literature 397: Cellphone Cultures**, taught by Steve Groening; and **Psychology 445: Theories of Social Psychology**, taught by Nicole McNichols.

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