

Lessons that I have Learned from Students in Peer Study Groups

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I have taught history courses and worked in academic assistance programs for the past 12 years at both the community college and four-year college level. I helped to introduce the Freshman Seminar at three institutions during that time. I have used a variety of strategies with students to help improve their academic performance. For the past six years I have worked with the Supplemental Instruction program, a program that works with forming student-led study groups that meet outside of class. It is on the basis of my observations and research with SI that I have some things to share this evening. Rather than a presentation filled with statistics, it will be illustrated by comments from both student leaders and student participants in student-led out-of-class discussion groups.

Dr. Alexander Astin in 1993 published What matters in college: Four critical years revisited. In this national study he examined hundreds of variables that could impact on student outcomes. Following is a summary of his findings. "Generally, students tend to change their values, behaviors, and academic plans in the direction of the dominant orientation of their peer group...Viewed as a whole, the many empirical findings from this study seem to warrant the following general conclusion: the student's peer group is the simply most potent source of influence on growth and development during the undergraduate years"

Astin's research does not say that faculty members are not important, but only that the peer group is more influential on a student than they are. It is important to understand why peer groups are so influential with students. Part of it stems from the social nature of education. The followers of Piaget and Vygotsky created an educational theory called constructivism. It said that good education requires the active involvement of students. Knowledge is created through the participation of the student learner. Finally, these proponents argue that education for most students must occur through collaborative learning.

In thinking about my observations of SI groups at UMKC and reading the professional literature, I have had to rethink some of my basic beliefs about learning and teaching. Following are some lessons that I have learned, some pleasant and some painful. I will include a number of student quotations to illustrate the points.

Lesson #1: I need student-led discussions to make my lectures and reading assignments more valuable to the students.

A student from the United Kingdom said the SI sessions that followed the lectures did not replace them, but actually added more value to the original lecture. This is an interesting choice of words. We often hear advertisements talk about the "value-added" qualities of their products. These features or qualities are suppo

enjoy even more the original product. Based on student comments I am applying the concept to education. I think that out-of-class peer learning can increase the educational productivity of the classroom experience. This term “educational productivity” is being more frequently used in the professional literature.

A student participant in a discussion group from Earlham College said, “I think that out-of-class discussions and smaller group discussions have really helped to . . . develop the ideas that I’ve learned in classes. For the most part we only have an hour or so in class or maybe two hours, and there is a small portion of time where we can throw ideas back and forth and get a discussion going....So after class -- in your room or in the coffee shop -- is a really good time to further those ideas and to flesh them out.”@

A number of students commented on how difficult it was to make sense of what was important in the class lectures. Some students took little notes. Others acted like stenographers and took down everything, and then couldn’t sort out the important from the unimportant. Following is a comment from a SI participant in the United Kingdom, “[The SI sessions] made me aware of what I should be looking at, rather than just taking notes about everything.” Another UK student had a similar experience, “It improved my understanding, the way I actually study. I am an improved student . . . and I think SI really helped in that.”

Lesson #2: As an instructor I sometimes spend too much time telling and not enough time modeling the thinking process for finding the answers and developing critical thinking abilities.

One student discussion group facilitator commented on this issue in this way, “Throughout high school and in some college courses I disliked situations where the teacher did things in his or her head and expected us to do the same -- I wanted to say, >Hey, wait, where did that come from? I need to see each step briefly but clearly. When I model my thinking process [during SI sessions] I try to keep it clear and quick but logical, pausing briefly after each step. I knew I was succeeding when today I could hear the students explaining their thinking process (nearly identical to mine) to their group members.”

Carl, an older student at UMKC said it this way, “Starting back to school is a new experience. The session helped me to organize my thoughts a lot better. The lectures came at me so fast. We did a lot of analyzing, taking what was talked about in the lecture and what we were reading about in three different books and being able to put all three of those aspects together into one area to understand on the same topic. The SI sessions have helped me to understand that I can do school work and soften the blow of coming back to school after such a long period of time.”

Lesson #3: I need to be careful in the classroom since I can by accident intimidate and scare some of my students.

Whether I want to admit it or not, I am in a position to intimidate my students. Because of my official position and my knowledge base, I can provide a formidable object to some of my students. It has little to do with me personally, but rather my position within the class as the professor. A significant number of students dare do not want to appear challenging to the professor. In many urban high schools the silent student is rewarded for their behavior.

This was a frequent comment by SI leaders from the United Kingdom, “Many students are frightened of the lecturer.”

Scott was a SI leader in Introductory Biology at UMKC. He said, “I think that the biggest thing I do in my SI sessions is to cut the intimidation factor. Many people get intimidated in Introduction to Biology, saying “Oh my god, its natural science, I won’t be able to do this, I hate science.” They are really afraid of it. I see a lot of people taking the course far too seriously. When I try to do is to crack it up and look at it a piece at a time rather than an ominous subject. They usually figure out that they knew more about it than that thought they did. When they can go into an exam a bit more confident about their own knowledge, they usually do a lot better. I think that is the most valuable thing about my SI sessions.

The intimidation factor can effectively block any comprehension of the course material. A SI leader made the following observation, “Students realize at the SI sessions what they do not understand; after determining this, students are less likely to be intimidated and more eager to tackle the more difficult concepts.”

David, a UMKC Sophomore student, said the following, “I felt comfortable about being wrong in front of other students in SI sessions, no insecurities.”

A young male SI student from UMKC said, “When I first came to the session I was real laid back and afraid to talk and I didn’t want people to think that I don’t know what I was talking about. I didn’t want to be wrong in front of other people. But, once I got in there, I realized that other people needed help too. But now I can participate and not feel so insecure.”

Lesson #4: Only through student discussions will many be able to construct and retain the knowledge from my class.

Some educational theorists argue that education is a social process. Following are quotations from students who share why it is important for them to talk and interact with the course material during the discussion sessions.

“I think that the best way to learn is if you can explain it to someone else, then you know what it is.” said Tracy, a math SI Leader from Ohio University

A SI leader said this about their approach to SI sessions, “I learned to reflect questions to the group. Invariably, the students together arrived at the right conclusions. I feel I

kept the focus of the conceptual thinking process by encouraging step by step analysis. We spent a great deal of time reviewing how we came to certain answers. Perhaps this was the students' greatest achievement as well, since they learned to follow this process by the end of the semester with less input from me. Of course, I continued to question them as we went along."

One student said, "I found that when I explained a concept to the rest of the group, I either confirmed that concept in my mind more than before, or I learned what I did not know."

Another student stated it this way, ". . . when I need clarification on something then it is necessary for me to explain how I am perceiving it."

Shanela, a first year student at Colorado State University said it this way, "It gives us a chance to talk about the problem and to work through it ourselves instead of the professor telling us what it ought to be. ***You work it yourself. This way it sticks in your mind.***"

Felicia, a first year student at UMKC said, "SI is a small group. I feel more comfortable in a small group. From the other people talking, I get a better understanding than what I get in the lecture. ***The other students put it into better words.*** It helps to identify the main points."

Lesson #5: I need to frequently seek student feedback to improve my classroom instruction.

Students are reluctant to talk in class to the professor. Professors often make the deadly assumption that silence by students means that everything is fine. We conducted a research study at UMKC by asking our SI leaders to record the number of questions asked by students in class for a period of two weeks. On average, three questions were asked each week in each class. Of the three questions, only one asked for deeper insight of the course material. The other two questions generally dealt with mechanical issues such as when the next exam would occur.

I think that it is critical that I use various classroom assessment techniques to gather input from students on what they think is the most important concept dealt with during a lecture and what their biggest unanswered question is. "The One Minute Paper," popularized by Dr. Patricia Cross is just one of many techniques that can be used to obtain feedback from students. Some SI programs outside the U.S. share that faculty members welcome the informal and anonymous feedback from the SI participants.

Lesson #6: There is more to learn at college than what happens in my class.

Many of the following comments were equally shared by student leaders of discussion groups or the participants themselves. "My confidence increases by leading a group, much more able to perform in public, much more able to think on my feet and see how

ideas fit together and my personal work improved. It makes you think about your work in a different way since you are leading the group, you restructure the work, you see new ways to fit the information together.”

Mel, a SI leader at Kingston University in England said, “Personally, I have gotten a lot of confidence from SI. You have to talk to a large group and think reflectively with them. It is up to me to break the ice. You reinforce your own study skills. So many people have different ways of learning things.”

Richard Light shares some research from his study of Ivy League students, “[Students] point out that the process of working in a group, in a supervised setting, teaches them crucial skills. The skills . . . include how to move a group forward, how to disagree without being destructive or stifling new ideas, and how to include all members in a discussion. Few students, if any, have these skills when they arrive at college.”

Alexander Astin reports that, “[T]he most important thing about collaborative learning is that it facilitates the development of teamwork skills and encourages the individual student to view each classmate as a potential helper rather than as a competitor. Under it, students learn to work together toward common goals.”

Students frequently reported that they met new people through the peer groups that they would not have normally interacted with: A student from England said, “. . . there were a lot of mature students that went and people you wouldn’t normally mix with and you could see what they said and hear their ideas, and just meeting people on the course.” Another from England reported that “[After participating in SI during one semester] I’ve kept the same friends and we almost do our own SI.”

A Stanford University senior said that, “It is funny that we are talking about things outside the classroom because I feel like that is the place that I have done my most growing.”

While cooperative and collaborative learning has been an important part of education for elementary and secondary education for many decades, it is a new activity for many postsecondary classrooms. I have only touched on a few of the benefits that students have shared on why they enjoy and find collaborative learning so helpful to them. I hope that you can find ways to structure both in and out-of-class opportunities for collaborative learning. I will now end with two last student quotations on this subject.

A student stated that, “It just changed who I am. It opened up new doors, new lifestyles, new beliefs, new value systems, especially those which I was not exposed to in such a homogeneous area as where my family lives....I also learned a lot about how students truly feel isolated on campus and don’t feel that they are part of the institution or have access to resources. And how important it is for institutions to welcome everyone.”

A female student in her final year at Grinnell College said the following, “One of the things I remember my mother telling me was ***not to let my studies interfere with my education***. What she meant, I guess, was that there are important things to learn at college ***in addition to classes*** . . . She was right.”