

Supplemental Instruction at LaGuardia Community College

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Abstract

As one of the few public institutions in the Northeast to provide Deaf and hard-of-hearing students open access to degree programs, LaGuardia Community College receives many students who lack the academic preparation for admission to either of two highly competitive, specialized postsecondary institutions which serve Deaf students exclusively – Gallaudet University and the National Technical Institute for the Deaf. Although these students possess high school diplomas, many experience difficulty and concomitant frustration keeping up with their hearing classmates.

Next to interpreter services, tutorial services offer students the best chance to compete equitably with their hearing classmates and to succeed academically. But in order for Deaf students to graduate and progress in their chosen fields of study, tutorial services at LaGuardia Community College needed to be reconceived and reconstructed. This new view of tutorial services will be modeled after the nationally recognized non-remedial academic support program for hearing students known as Supplemental Instruction (SI).

Introduction

LaGuardia has responded in a supportive manner to the problem that many Deaf students face, i.e., difficulty and concomitant frustration keeping up with their hearing classmates in main-

stream classes. At LaGuardia, sign language interpreters are commonplace; hearing classmates are recruited as notetakers, and tutors are provided upon request. These services, although mechanisms for equal access to classroom instruction, do not go far enough in creating optimal learning experiences for Deaf students. Interpreted content is secondhand, and its quality is highly dependent on the expertise of an individual interpreter. With the demand for certified interpreters far outweighing the supply, certified interpreters have become all too rare a find – leaving some classes, at best, filled by inexperienced interpreters and, at worst, with no interpreters at all. Notes taken by other students, likewise, are secondhand and highly dependent on the accuracy of a notetakers' understanding of a particular lecture. In addition, notes are written in English – the language Deaf students still struggle to come to know even at the college level. And, while hearing students have the opportunity to give some initial shape to incoming information through notetaking, since Deaf students must, for the most part, constantly watch an interpreter, they are precluded from looking down to take notes. This denies them the first pass that hearing students have at organizing, and thus subsequently remembering, “orally” conveyed information.

Over the years, it has become apparent that the most effective way for Deaf students to keep up with their class work is to provide them with tutorial services. With such services, students receive information firsthand, “talk” directly to their tutors and have the luxury of time to write notes for themselves. Ironically, this support service,

which does seem to hold the most promise, has suffered from the most neglect. Only certain students are eligible for monetary support for tutors, there is no formal training or screening program for tutors, and little is known about the quality of tutoring offered or if, in fact, tutoring is beneficial to the students. But even more harmful is the fact that tutors have to do much guessing about what transpires during classes that students attend. They are, in a sense, tutoring to the trees, without a picture of the forest. In addition, without funds to purchase the texts that students are using in tier classes, tutors are often forced to read assigned readings that need to be digested before the tutoring session begins, during the session itself. This wastes precious instructional time.

Next to interpreter services, tutorial services offer students the most chance to compete equitably with their hearing classmates and to succeed academically. But in order for Deaf students to graduate and progress in their chosen fields of study, tutorial services at LaGuardia Community College needed to be reconceived and reconstructed. From our years of experience, we have come to see that tutors need to be as effective as possible if Deaf students are to learn in mainstream-postsecondary settings. They need to be thoroughly trained, know what transpires in the classes they are hired to tutor, have access to the necessary books required each session early-on in the session, be well-versed in the reading and requirements of all assignments and be able to converse with their tutees effortlessly and meaningfully. This new view of tutorial services will be modeled after the nationally recognized non-remedial academic support program for hearing students know as Supplemental Instruction (SI).

What is SI?

SI is an academic assistance program that differs from traditional tutoring. Rather than targeting high-risk students, SI targets high-risk courses. These are courses which students typically fail, drop out of or do not do well in. SI also requires that "SI leaders" – trained by an "SI supervisor" – attend class sessions, take notes and organize at least three out-of-class weekly study group sessions. Rather than viewing themselves as teachers, SI leaders view themselves as facilitators who encourage student interaction and student-initiated questioning while assisting them in the in-

tegration of ideas culled from lectures and readings (Zaritsky, 1994). Leaders use the course texts, lecture notes, supplementary readings and examples of former tests as the bases for instruction.

SI embraces the notion that knowledge, rather than being transferred from the head of the leader to the students, is something that leader and students construct by talking or dialoguing together. Commonly referred to as **collaborative learning**, the idea that knowledge is socially constructed views learning as essentially a reaculturative process (Bruffee, 1993) where students, over time, become members of a new knowledge community – the knowledge community of their leader. They do this by taking on the characteristics of their leader, specifically by taking on the new academic language used. This, however, can only be achieved by having opportunities to "talk" in the new language and by receiving response to this talk.

SI also views student leaders as model students – students who are looked up to because their behavior, perhaps more than their knowledge, offers students something to emulate. Rather than being "smart", students come to see that their leaders know how to become smart. They come to see that leaders struggle as well when they are confronted with confusion and that being intelligent perhaps requires more perseverance than genetic endowment. They see firsthand that learning means allowing time for thoughtful analysis and having the desire to tackle a problem from different angles.

Finally, SI strongly supports the view that all students have capabilities to learn and that this should be made clear to students by providing them with opportunities to feel good about themselves as learners. As students wind their way closer and closer to acceptable responses, they should be heartily praised each step of the way. Sharing ideas is full of risk for students who might not have had successful histories as learners, but if they are positively acknowledged for offering ideas, they will most likely continue to remain active in their learning.

What is SI's Track Record?

SI was conceived at the University of Missouri – Kansas City (Martin and Arendale, 1983; 1990; 1992) and has been certified as an Exemplary Edu-

cation Program by the U.S. Department of Education. In its 10 years of existence, participation in SI has proved to significantly reduce course failure, improve average course grades and increase persistence towards graduation. It is currently in place in over 600 schools, including over 60 community colleges, and in countries such as Australia and Sweden.

SI has a successful track record. Lundeber and Moch (1995) investigated the relationship between learning and social interaction among women college students in an SI program for science classes and found it to promote intellectual risk taking. Martin and Blanc (1994) studied SI's effect on seriously underprepared students and ascertained that these high-risk students could master difficult content and develop study skills simultaneously. Kenney and Kallison (1994) researched SI's impact on the learning of math and found the SI model to be more successful than the traditional content-only focus of traditional tutoring especially for lower-achieving students. Finally, Congos and Schoeps (1993) discovered that with SI there was a marked decrease in the number of withdrawals from courses.

In the fall of 1993, SI was piloted at LaGuardia Community College with hearing students in Fundamentals of Human Biology I – a high-risk course. When grades of students who attended SI sessions for this section were compared with those of students who were in an identical course taught by the same instructor during the fall of 1992 before implementation of SI, there were noticeable differences. Successful completion of the course – defined by students receiving a grade of A, B or C – improved from 43.6% in the non-SI section to 63.2% in the SI section. Percentages of students receiving grades of A increased from 8% to 17.7% and those of students receiving grades of B from 13.3% to 25% (Zaritsky, 1994). Students, then, who attended SI sessions performed better than a control group of students who did not.

What is the Goal of SI for Deaf Students at LaGuardia?

We, of course, hope to replicate the success rates mentioned above with our Deaf student population and, in so doing, remove the stumbling blocks posed by several courses which serve as gatekeepers, frustrating and holding students back from making the most of their college years. Typi-

cally, these courses have been English Composition (English 101), Biology (SCB 101) and Math 96. On a larger scale, we hope to become a national model of SI instruction targeted for Deaf students by sharing with our colleagues in other settings what teaching techniques and learning strategies worked best for tutors and tutees. As of this date, the writer is not aware of SI having been used or currently being used in any postsecondary program for Deaf students.

How Does the SI Model Used with Hearing Students Differ from its Use with Deaf Students?

SI leaders for hearing students introduce students to the idea of SI during the first day of classes and request schedules for the students interested in participating. During the second day of classes, the schedule of SI classes is announced and distributed.

The SI model for Deaf students has different initial procedures. Their counselor introduces all Deaf students scheduled to take one of the high-risk courses to SI during the time of registration. At that time, their schedules are arranged to fit two, one-hour study-group sessions. Study group sessions must be scheduled to fit the availability of the student leaders as well. Requests for interpreters for SI courses are given priority status by the coordinator of interpreter services.

The evaluation plan funded by the State Department of Education requires that both SI leaders and students keep learning journals. For the SI leaders, we ask that, for each SI session, they keep brief anecdotal notes on which SI strategies have more impact on students than others. We need to also ask that the SI leader pay close attention to the kind of “talk” that transpires during small group work and to write brief anecdotal accounts of the ways in which students explain their understandings to one another. Here we would be interested in finding out what specifically students do, through language, to help each other understand new concepts. More specifically do they:

- Use analogy and/or example?
- Refer to past encounters with similar material?
- Use more visually based ASL grammatical constructions such as classifiers,

referencing, constructed action or constructed dialogue?

For the students, in addition to asking them to pinpoint the strategies they found most helpful, we ask, at the conclusion of each session, to jot down what specifically they were confused about at the beginning of the session, the reasons they were confused and what they subsequently learned.

What Additional Strategies Might be Tried with Deaf Students?

Encourage Notetaking

Our SI leader for the MAT 96 course is Deaf. After consulting with him, he agreed to try to take as many notes for himself as possible. We asked him to consider this idea not only for the good that it would do to have a self-written record of the lecture, but to show the other Deaf students in the class that it is not totally impossible all the time to take some notes. Our Math 96 leader explained that he is able to job down the important concepts the teacher covers in a session as well as copy examples from the blackboard. Using this student leader as a role model, Deaf students would be able to see firsthand how notetaking and watching an interpreter are, at times, not necessarily mutually exclusive activities.

Use Text Interpretation

In courses other than math, we encourage the use of **text interpretation**. This means that either sections of textbooks or novels or stories that the SI leader deems necessary for students to understand should be made into transparencies and projected, through the use of an overhead projector, on an empty classroom wall. The leader should stand to the left of the projected text (facing the class), read a sentence ahead to him or herself and then interpret that sentence using ASL. Once the meaning of the sentence is presented, he or she should backtrack, using his or her finger underneath the projected sentence that was just interpreted to allow students to the opportunity to re-read the sentence to themselves. Vocabulary words that still cause students difficulty should be interpreted again for them.

Use Good Models of Student Work

Particularly with respect to English 101, it would be most helpful for the students to see examples

of the edited work of other Deaf students who have taken English 101. This will offer students opportunities to see writing that is appropriately scaffolded – i.e., within their reach given instructional assistance. Representative examples in several rhetorical modes (argument, compare/contrast, analysis) as well as the researched essay could serve as models and springboards for their own writing.

Assign Summaries and Questions about Lecture Notes as Homework

It might be helpful for students to arrive at their study-group sessions with summaries of the class notes along with written questions about any parts of the notes that were problematic for them. Leaders can start the session hearing the summaries and questions which will give them a handle on how much each study group member understands. With this information, leaders can zero in on a particular student's mis- or non-understandings.

Conclusions

Our program of SI assisted 72.4% of its participants in receiving grades of A, B or C. In addition, over 75% of the students attended 85% or more of the study-group sessions. Another way of looking at the influence SI had on student achievement is to ask why 27.6% of the students received grades of only D or F. In the majority of these cases, students who did not receive grades of A, B or C either attended 50% or fewer of the study-group sessions, did not turn in required assignments or did not attend required laboratory sessions which counted as part of their course grade. Obviously, students who attended more SI session fared better than those who attended fewer sessions but for a few other students, attending SI sessions was not enough to assist them in getting grades of A, B or C. Lack of diligence and discipline worked against these students and were forces beyond the poser of SI influence.

Perhaps the more important question to ask at this point is what specifically it was about that enabled its participants to experience success in mainstream-college classrooms. For this answer we look to some specific strategies that were used by the SI leaders, how the SI model fostered a sense of accountability in the students, and why the SI model suits the needs of students who learn visually.

Specific Strategies Used by SI Leaders

The Explicit Teaching of Reading

Our first few strategies clustered together and came to fruition when virtually all SI leaders realized that they were facilitators for specific content areas, **as well as for the reading required** by those content areas. When teaching Deaf students, there is no way that written English and content can be separated. Each must be embedded in the other if we expect Deaf students to be educated well.

The Use of Discussion in the Teaching of Writing

Again, in our English 101 SI study-group sessions, SI leaders noted the need to thoroughly discuss any reading, film or concepts brought up in class prior to asking the students to do any writing assignment about them. Related to this, before students would embark on an essay assignment, our SI leader facilitated a discussion to ensure that students understood the essential meaning of the essay question.

The Use of Drama, Analogy and Drawings

In their journals, students reported that the use of drama, analogy and drawings helped them to visualize concepts more easily.

SI Students Became More Accountable for Their Own Progress

It was an eye-opening experience for many of our students to receive low grades on quizzes and tests. Used to social promotions from their respective high schools, they began to see that they could not get by without “sweat,” and if they did not study, they would not pass. Being held responsible for their own progress was a new demand as was the reality of the aphorism that without pain, there would be no gain. As students became more accepting of the idea of self-discipline, they became less passive about their learning. They also started depending more on each other and less on their SI leader for explanations, appreciating the fact that incorrect answers that were student-generated, discussed and corrected as a group were more enlightening than answers explained by the SI leader.

The SI Model Suits the Needs of Students Who Learn Visually

This study has taught us that SI is an **essential component** of a postsecondary program for Deaf students in mainstream, postsecondary settings. In all of the courses offered with SI, both students and leaders recognized that the majority of learning transpired not in class but in the SI study-group sessions. There were a variety of reasons for this, ranging from feeling that the classroom teachers “surface taught,” went too quickly or did not present concepts in a visual way, did not allow Deaf students time to look away from their interpreters, to their textbooks and then back to their interpreters again before moving on to a new topic, or even to the seemingly unavoidable fact that sometimes interpreters showed up late or did not show up at all.

The study group instilled a certain level of comfort and thereby confidence in the students—two feelings that need to be internalized before any learning can take hold. Of particular interest was an SI leader’s comment that “Deaf students need absolutely excellent teachers” which struck this writer as being very true. Deaf students face enormous challenges in the mainstream classroom – much more perhaps than any other group of students. Are there enough excellent teachers out there to ensure that Deaf Students will not have to worry about getting the education they deserve? While we would like to believe that there are, we know there aren’t. With this in mind, SI for Deaf students should be a more mandatory than optional component of a postsecondary mainstream program. It is the “second breath” in Deaf students’ efforts to compete equitably with students who are far less challenged in becoming college-educated.

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