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Silent Voices: How Language Minority Students Learn in the Content Areas

Introduction

Won Joon told me that his math teacher is a nice person, but confuses students by not answering their questions during class and asking them to come after school. He said that when his teacher does this, many students give up for the period. Juan explained that his English teacher helps him become a better writer because she emphasizes the process of writing. Jennifer’s chemistry teacher is very flexible and lets her use her Korean-English dictionary on all assignments and tests. Susan became depressed in her Algebra 2A class because the teacher did not believe she could handle the work in English. Proudly, she informed me that in a very short time she has proved herself by getting the best grades in the class. Jorge worried because one of his teachers talks too quickly and is difficult to understand. These five students and I have spent the last two semesters discovering how ESL students learn in the content areas.

As an ESL instructor in the Los Angeles Unified School District, I have become increasingly interested in how students who are acquiring English as their second language learn. The linguistic, cultural, and educational diversities of ESL students explain the difficulty of identifying any one educational pedagogy to be used in ESL instruction. Therefore, in the last eight years of teaching, I have found myself in a continual process of reestablishing my priorities, reevaluating my skills and techniques in order to help my students learn English. During this process, I have observed my students working on their math homework, their science projects, and their history assignments, and I have often wondered how well they do in their content area classes. I know from trying to assist them at different times that explaining to non-native speakers how to construct an algebraic formula or interpret a molecular structure is extremely challenging. Adding to second language teaching the additional challenge of including content can be overwhelming to both teachers and students alike.

In the school where I am teaching we have a student population of 3300, over one-third of whom learned English as their second language. Therefore, it is an absolute certainty that teachers of all subjects will have the experience of teaching language minority students. How do teachers approach the situation of teaching both content and language? What skills or techniques do they use to reach their non-native speaking students? Simply put, what works and what doesn’t work in the teaching of ESL students in the content area classes? In order to find the answers to these questions, I went to the sources themselves: the students and the teachers.

Five Student Voices

Won Joon, Susan, Jennifer, Juan, and Jorge are five non-native speakers whom I have had as students and with whom I’ve become friendly. They were excellent sources of information because they are all bright, articulate, observant, and willing to talk about their educational experiences. Reading the journals that I had asked them to keep and then following up with informal discussion sessions enabled me to gather a great deal of information about what they thought about their math, science, and social studies classes. Their participation

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was strictly voluntary. All five kept an informal journal, writing down their impressions and feelings concerning their teachers, the content of their classes, and the methods or techniques that their teachers used. I wanted them to start to observe their teachers in action and learn to evaluate them with a critical eye. I started simply with the question: What things help you learn in your classes? They provided the rest, and through their observations, I was able to formulate new questions and to delve more deeply into my own concerns. The journals quickly became secondary as I was able to get much honest, unrestrained information from our discussions together.

The first observation made in our early discussion sessions was Jennifer’s: “Teachers talk too much!” Jennifer felt that she was able to learn better in classes where she had the opportunity to interact with other students and not simply listen to the teacher lecture. Reacting similarly to classes in which the teacher dominated, Juan said that he was not comfortable asking questions in classes where the teacher’s primary mode of teaching was lecturing. For him, interrupting the teacher was impolite, and he believed that both the teacher and the other students would resent the time it took to respond. The students felt that it was in their math and social studies classes that the teachers talked the most. Generally, Jennifer, Susan, Juan, and Jorge believed that their teachers talked eighty to ninety percent of the time. My own observations of their classes confirmed the truth of this belief. Within individual class periods, teacher talk represented anywhere from seventy-five to one hundred percent of words spoken in the classroom. Related to the problem of teachers talking too much were the problems of teachers talking too fast and the students’ difficulty in understanding class lectures.

Many of the students’ comments referred to the relationship between themselves and the teacher. Jennifer and Susan felt that teachers in the United States did not work as hard to help students as teachers in Korea. They both equated strictness and control with concern for learning and felt that their teachers here did not spend enough time responding to student behavior, good or bad. Juan seemed to concur because he wrote that one of his teachers should “maybe have a little more pressure because they see she doesn’t go around checking their work and they don’t work as they should.” Susan resented the fact that her math teacher gave pop quizzes as a punishment for bad classroom behavior. As a polite and industrious student, she believed that there were other ways for the teacher to maintain a good classroom environment. For all five students, most of their comments about the teacher-student relationship centered on how teachers respond to them. They felt that ESL students need more assistance than other students and identified the good teachers as ones who recognized these needs:

Jorge: He is well-behaved and he wants us to be, too. He tells you if you are doing bad work or if you are doing very nice work.

Juan: She lets us share our ideas with other students. I feel comfortable asking my friends.

Susan: My chemistry teacher gave us his phone number to call him if we had any questions and I did it.

These students also talked a great deal about teaching style and techniques. Jorge wrote in his journal, “When class starts he is there, when roll had been taken he just said ‘work’ so everyone get their project and work and during that time the teacher is talking with the teacher that is the next room.” He later told me that when ESL students come into contact with teachers such as the one he just described, many of them feel cheated but refuse to complain. As we discussed this situation, I learned that they, just like first-language students, expected the tone of the classroom to come from the teacher.

These students also felt that a teacher’s style could make an interesting subject deadly boring. All five had the same American history teacher and the others laughed as Susan described a typical day: “We take out our books and copy down the terms for the chapter. Then, we look in the book until we find the words and copy down what they mean. We turn it in when we are finished and then we have a test on the terms.” This procedure is repeated for every chapter and they all insisted that there is little or no discussion about the “terms.” Not too surprisingly, none of them read the chapters for content, but simply scanned the chapters in order to locate the “terms” and copy their definitions. They referred to the class as easy and admitted that they didn’t learn anything, but I was surprised to discover that they were not more insulted about how their time was spent.

Although they disliked the boredom of doing the same thing every single day, each of them admitted that they felt struc-
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ture was important for ESL students. Most, if not all, of their classes followed a familiar weekly pattern that included introduction of a new concept, explanation by the teacher, group practice, individual practice, homework, and tests. They were comfortable with these patterns but expressed some desire for variety. Won Joon mentioned how much he enjoyed his world history class in summer school because the teacher introduced games, movies, and a student-made newspaper. Jennifer’s favorite classes were science classes because the labs enabled her to work concretely with the concepts she was learning. All of them referred to activities such as assemblies, movies, field trips, library assignments, and discussions as interesting alternatives to simply working in a textbook. They remembered these types of activities as being the most useful. I was surprised to learn that they felt very few of their teachers showed any creativity in teaching their subjects and the ones who did they remembered fondly.

The physical arrangement of their classes rarely changed from room to room. Desks or tables were generally arranged in a lock-step fashion with everyone facing the teacher. Some classes, usually in science, offered the chance to work in pairs and a few classes offered a minimum amount of group work. Won Joon suggested that arranging the desks in circles would encourage students to communicate more, and the others quickly agreed that their classroom environments were much too restrictive. Jorge remarked that very few teachers allowed students to move around the classroom freely, although he had been able to do so in Mexico and wished he could here. They all wished their classrooms varied more in arrangement and said they benefited from the opportunity to work with other students, either in partners or in groups. Juan also mentioned that it was impossible for teachers to evaluate students unless they moved around the classroom frequently. He and the others thought teachers who remained only in the front of the room or at their desks were “lazy.”

According to these students, their teachers have evaluated them using most of the traditional methods. Quizzes and tests appeared to make up the bulk of the evaluative strategies used in their classes. Susan, Jennifer, Won Joon, and Juan stated that about half of their tests were objective and included true/false, matching, fill-in-the-blank and multiple choice items. Other methods of evaluation included essays in science and social studies, labs and problem solving in science, numerical and word problems in math and homework in all subjects. A surprising number of teachers simply wanted these students to copy answers from a textbook. I asked them to determine how much original writing they actually did in their classes and, with the exception of their English courses, only a limited amount was required.

In talking with Juan, Jorge, Jennifer, Susan, and Won Joon, I was surprised to discover that they were able to identify very few adjustments made by the teacher to assist them as language minority students. Jennifer and Susan mentioned that some of their teachers offer to help them during non-class hours and both say they take advantage of this opportunity. In contrast, Juan, Jorge, and Won Joon say they rarely do. During class, the students observed their teachers speaking more slowly, using the overhead projector and providing visual aids which helped them grasp new material. Yet, none of them were ever asked to share any previous knowledge of the subject matter with the rest of the class. Nor did they feel that they were encouraged in any particular way to improve their oral communication skills. When I asked them to identify any strategies or techniques that would better help them learn, they replied with answers that could apply to any learner: individual attention, immediate feedback, clear explanations, encouragement, and caring.

The Content Area Teachers

In my observations of content area teachers, I wanted to see whether what I found supported what my students had told me. I was also especially interested in discovering whether content area teachers used strategies that might benefit language minority students in developing language as well as understanding content. In conversations, the teachers explained to me that they had had little, or in most cases, no training in second language acquisition and ESL techniques.

I observed three math classes, two social studies classes, and one science class. In each of these classes, at least seventy-five percent of the students were language minority students. While I saw little evidence of training in ESL techniques, many of the teachers displayed intuitive behaviors that they had obviously adopted because of their experience with these students. In all but one of the classes, I was able to see evidence of such adjustments. Teachers talked at a much slower rate. They gave instructions and other information

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visually, usually on an overhead machine. They provided many examples. Aides were available in most classes. Some teachers drew upon personal experiences to describe difficult concepts. They used gestures and body movements to help comprehension. Teachers moved frequently around the room. Text-specific vocabulary lessons were included in the curriculum.

Ironically, one teacher explained that he made no adjustments for his ESL students except to translate in Spanish if they asked him to. It was that teacher who had the least amount of contact with the students, and whom Susan referred to as the one who simply asked them to copy “terms” from the textbook.

In all the classrooms I observed, the teachers monopolized at least eighty percent of the speaking time. A government teacher did give a writing assignment, but it was the only one required for the entire semester. She informed the students that this writing would not be graded except as “acceptable” or “unacceptable,” and the assignment was structured as a closure exercise that required very little student input. The types of student response most often asked for were answers to objective questions from the textbook or a worksheet. The one notable exception was in a life science class where students were encouraged to interact with one another in a group situation. In addition, that teacher began his lesson on the heart with a question that allowed students to bring to the lesson their prior knowledge: “Is the heart an important organ?” On the basis of the students’ responses, he then was able to ask them “why?” and thus to ascertain how much they knew already about the function of the heart. Just as important, he encouraged his students to take an active part in their learning and to work on their oral language skills.

Most of the teachers showed a general concern for the students in their classes and three of the six responded to the individual needs of particular students at least once during the period I was there. All of them asked for questions from students, but with varying degrees of success, possibly because students did not feel comfortable asking for help. Four of the teachers asked for volunteers to respond to questions and only one picked students at random, but all five showed sensitivity to the various student responses.

While a great deal of what my students told me was substantiated by my observations, the teachers did hold some surprises for me. I was heartened to see that these teachers showed much concern for their language minority students and a willingness to help them. Those techniques they did use seemed worthwhile in meeting the needs of their ESL students. However, additional use of adaptive techniques in ESL instruction could only help their students more. For example, while my observations were only limited to one class period, I had hoped to see much more diversity and creativity in the lessons I observed.

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To reinforce much of what the students said, more opportunities for oral communication and student interaction seem to be needed for language minority students in the content area classes. In addition, flexibility and variety in the classroom environment as well as the lessons being taught might encourage more participation and stimulate interest. Lessons used with ESL students need not be simply “watered down” versions of lessons for native speakers, but should help to enlist what the student already can do in order to learn new material. Included with this article are a number of other, more specific recommendations for teachers.

Implications for Teaching

One of the benefits of observing one’s colleagues in action is the opening created for joining them in a collaborative partnership. ESL instruction and the content areas offer a perfect opportunity for teachers to join forces in order to improve both programs. The purpose of the ESL curriculum is to expose students to the English language and prepare them to succeed in their content area classes. If ESL instructors were to meet with content area instructors with the purpose of sharing ideas, the programs could be mutually supportive. For example, reading and writing skills could be taught in ESL courses through materials that relate to content area classes. Key vocabulary, prefixes and suffixes, roots, cognates and other lexical items that are necessary to understand science, math, and social studies could be included in grammar lessons in ESL. In other words, the content of ESL courses could include the content of other disciplines.

In addition, content area teachers could learn about language acquisition in order to incorporate language skills into their content lessons. Incorporating reading and writing strategies in their courses would not only improve students’ language skills but increase their subject area comprehension. Non-traditional strategies such as working in groups, peer tutoring, and using dialogue journals can also be introduced to the content areas to help ESL students who have difficulty understanding standard lectures and textbooks. The possibilities are endless, and the ESL instructor is an excellent

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resource for ideas and suggestions in adapting lessons for non-native speakers.

If other campuses are similar to my own, the ESL department teachers and students are often isolated from the mainstream school population. Many members of the school community have little or no understanding of what actually goes on in ESL. Collaboration should help increase mutual awareness and promote continuing efforts to improve the education of all students. Besides, improving the relationships between groups can only help improve the overall atmosphere of the entire school.

General Recommendations

- Reduce teacher talk time considerably and explore alternatives to the teacher-directed lesson.
- Give more opportunity for student interaction.
- Encourage students to communicate frequently and meaningfully during class.
- Include language instruction that is pertinent to the subject area in daily lessons.
- Create more opportunity for collaboration between ESL and content area instructors.
- Maintain a schedule, but allow for flexibility in adhering to it and adapting it.
- Include more activities that promote higher-level thinking skills.
- Explore different ways of changing the classroom environment.
- Provide immediate feedback to students whenever possible.
- Allow students to share their own experiences or background knowledge with the class.
- Remain in continuous contact with students by asking questions, sharing ideas, walking around the room, or observing the students work.
- Provide different situational opportunities for students to ask questions (in front of the class, student to teacher alone, student to student).
- Emphasize the benefits of living and learning in a pluralistic society and encourage students to explore their diversity.
- Incorporate various methods of assessment and evaluation that emphasize student growth.

Specific Recommendations

These recommendations were collected from my observations, my own experiences, conversations with content area teachers, and the texts that are included in the bibliography at the end of this paper.

Math

- Identify whether errors signal a failure in mathematical competence or a language problem.
- Use writing strategies such as learning logs or dialogue journals to let students communicate what they have learned in their own words. These activities are good practice for participation in higher level math courses, like geometry, that require students to incorporate more language.
- Introduce language instruction, such as vocabulary practice, and practice in producing special syntactical structures and the semantics used in common mathematical sentences.
- Avoid heavy reliance on the math textbook. Use appropriate, non-text driven materials, such as pictures, charts,


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instruments, blocks, and other manipulable items.

- Include practice in rewording problems in simpler or different language.

Science

- Use students' own knowledge of their physical environment to introduce or derive information.

- Include as much hands-on experimentation as possible.

- Encourage students to use inductive and deductive reasoning to become actively involved with their learning.

- Teach reading skills, such as finding the main idea, skimming, interpreting charts and graphs, and understanding cause and effect, in order to make the science textbook more accessible.

- Teach the inquiry approach.

- Teach higher level thinking skills like hypothesizing and predicting.

- Have students convert their findings into language, both in oral and written form.

Social Studies

- Remember that learning a history different from one's own is a tremendous undertaking.

- Teach reading skills such as finding main ideas, interpreting tables and charts, understanding relevance and significance, and finding comparisons and contrasts.

- Use students' own cultures and histories to compare and contrast with what they are learning.

- Teach common themes, such as conflict, freedom, and discrimination, in order to make relationships between students' own cultures and their new one.

- Use films, pictures, historical artifacts, and multimedia materials.

- Experiment with a variety of oral language activities: role playing, creative drama, music, and values clarification discussions or simulations, for example.

Bibliography


Beth Winningham is an ESL teacher at Grant High School in Van Nuys, California. She has recently been a teacher consultant on a UCLA-sponsored program aimed at preparing second language learners for university-level writing, and she participated in UCLA's 1988 Teacher as a Researcher project.