# Chapter ( S ) Nine

## Complex Instruction in the Untracked Social Studies Classroom

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s the curtain rises, an institutional gray desk, a round table, carts loaded down with textbooks, and a sagging sofa take shape. Although it is September, the heat of August still lingers. Jean rises to open a window. The social studies teachers at Valleyview Middle School in West Los Palos, California, have gathered in their department office to share insights from summer workshops and travels and to plan for the upcoming year. They sit casually, some at the table, some on the sofa.

Valleyview is a newly reconfigured middle school. In recent years, the school has had a dramatic influx of Spanish-speaking and Asian students. In the face of these changes, most teachers agreed that they could no longer continue with business as usual. Too many kids were shut out, got lost, or were dispirited. Indeed, given the widening gap between worn-out pedagogy and recent changes in the student body, the teachers boldly took action: they decided to untrack Valleyview. Upon making this decision, the school applied for and received a grant from the state to plan and implement innovative approaches to teaching in heterogeneous classrooms.

A state grant sponsored four 7th grade teachers' enrollment in a two-week institute at Stanford University devoted to Complex Instruction. CI, a model of cooperative learning for heterogeneous classrooms, focuses on the development of students' higher-order thinking. At the institute, the teachers studied the principles of CI and practiced it with middle school students. During the following school year, the four teachers tried CI in their classrooms. Staff developers from Stanford visited their classes and provided feedback on implementation.

#### The Complex Learning Classroom

These four teachers, convinced that the approach would work, were eager to get all members of their department to move in the direction of Complex Instruction. Imagine that we are in the school when these teachers return from their training. Imagine further that we are present at the first department meeting and

\*Writing of this article was supported in part by grants from the Carnegie Corporation of New York and the Stuart Foundations of San Francisco. these teachers are excited by what they have to share. As the action begins, the four Complex Instruction advocates are engaging in a dialogue with their skeptical but interested teacher colleagues—trying to persuade them of the value and practicality of Complex Instruction. We eavesdrop on their conversation.

#### Managing the Classroom

SIT (Skeptical but Interested Teacher): I tried cooperative learning, and once was enough for me—what a disaster! The kids would not stay in their groups. Many were not doing their work. I ran from group to group putting out fires. No learning was taking place.

CIA (Complex Instruction Advocate): Yes, this can definitely happen when the teacher shifts to small groups that are supposed to work on their own. Cooperative learning requires new behaviors for both the students and the teacher. The teacher, as you found out, can't be everywhere at once. With groupwork, a fundamental shift in the teacher's role is unavoidable: You need to delegate authority to the students so they will take responsibility for their own behavior and learning while in the groups.

SIT: How does one do that?

CIA: In Complex Instruction, an activity card lays out a different task for each group (e.g., see figures 1a and 1b). Students as a group are responsible for completing their task. In addition, each student writes an individual report after completing the task.

SIT: Sounds pretty straightforward, but that isn't going to control behavior by itself.

CIA: You're right. That only prevents you from having to run from group to group telling people what to do. We use two other important methods of classroom management in CI to control behavior. One is early training of the students in new cooperative norms, or rules for their behavior. Last year, we prepared students for groupwork before we started with the regular curricular materials. Students learned how to help each other, how to explain to each other, and how to talk to each other about their ideas. They understood that no one is done until everyone is done. We used skill-building activities in small groups to develop the behaviors that students need for working well in groups. The students

## Figure 1a: Activity Card

#### **Unit: CRUSADES** HOW DO HISTORIANS KNOW ABOUT THE CRUSADES?

Activity 1: Crusader Castle, Crac des Chevaliers, Syria, 12th C

#### Activity Card

Historians often turn to art, architecture, and craftwork of the period they are studying for clues about how people lived and what they wanted to remember.

As a team, look carefully at the photographs of Crac des Chevaliers and discuss the questions

- 1. Why would the Crusaders build a castle?
- 2. What does the architecture of this castle (e.g., the floor plan and interior/exterior structures) tell you about how warfare was conducted in the medieval times?
- 3. If you lived inside this castle, how would you defend it against enemy attacks?
- 4. If you were an enemy invader, how would you plan your attack of this castle?
- 5. What were the roles of men and women inside the castle? What were the roles of children?

Design and build a castle or a fortress to protect your group from adverse forces. Present your castle to the class.

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came to feel that this was the way they ought to behave, and they criticized each other if someone refused to help or to explain.

Another important way a teacher can delegate authority to groups is through the use of roles. Every student plays a different role and the roles rotate. For example, one student is a facilitator whose job it is to see that all group members understand what to do and get the help they need. When someone wanders away from a group, for example, it is the facilitator's job to find out what is wrong and to get the student to rejoin the group. Another role might be the recorder who keeps notes of the group's discussion and checks to see whether individual reports have been completed. In other words, you get the students to mind each other's business and to do many of the supervising jobs that teachers usually do.

SIT: Oh, I do that. I use roles in groupwork. I usually set up activities so that one student is the artist, another

## Figure 1b: Activity Card

#### **Unit: CRUSADES** HOW DO HISTORIANS KNOW ABOUT THE CRUSADES?

Activity 6: Gesta and Raymond's Eye-Witness Accounts of the Siege, Attack, and Capture of Jerusalem

#### **Activity Card**

An important resource for historians are eyewitness accounts of historical events. Gesta and Raymond both participated in the first crusade and wrote separate accounts of their experiences.

As a team, read the selections from Gesta and Raymond's accounts of the siege, attack, and capture of Jerusalem. Discuss the questions below.

- 1. When did the siege take place? How did geographic conditions (e.g., climate and terrain) play a role in the outcome of the siege?
- 2. Given that Jerusalem is surrounded by a wall, what might the "siege machines" have looked like? Where did they find materials for them?
- 3. If you were a Saracen, how would you defend your city?
- 4. The Crusaders were outnumbered 5 to 1. How do you account for their ultimate victory against such odds?

Design a mural which depicts the main events of the siege, assault, and capture of Jerusalem. You might consult the reproduction of a mural in this package. Share your mural with the class.

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is the writer, and a third looks up all the questions in the resource books.

CIA: Those are roles too, but they are not the same kind of roles we use in Complex Instruction. The roles you use are a way to divide the labor, whereas the roles we use are designed to help the group interact and work together. We call CI's roles procedural roles. Dividing the labor may seem efficient, but it doesn't encourage students to interact and talk with each other. According to the research on Complex Instruction, it's the process of talking and working together that produces the learning gains (Cohen 1984).

After you get the hang of these procedural roles, you see how to make the activity cards, the cooperative norms, and the roles work for you. You don't have to solve all the groups' problems yourself. Say, for example, ten minutes after launching groupwork, you find a group floundering. In first approaching the group, you might ask them if they have read the activity card and discussed what they are supposed to do. If they have not, you could suggest that they do so and that you will be back in a few minutes to hear the results of their discussion. Or, if some students have questions, you might ask them to find out whether anyone in the group has the answer. Only when no one has the answer can the facilitator call you over to ask the question. These norms and roles really keep the "Teacher! Teacher!" cries at a minimum.

## Curricular Materials for Group Work

SIT: My groups work pretty well when I have them reviewing for a test or working on mapping activities. I have trouble, however, when I'm trying to focus on real thinking, on getting the hard-to-understand concepts. I don't have good activities for groupwork; the ones at the end of the chapters don't work.

CIA: Proponents of CI believe that to get the most out of groupwork, you must begin by redesigning the curriculum. When we focus on developing higher-order thinking and on teaching central concepts, we will use groupwork and the CI activities designed specifically for groupwork. Don't panic! We do not use groupwork all the time. We will still use the textbook and the many valuable resources we've accumulated in this department over the years. To tell you the truth, what really sold me on participating in the program were the units they showed us at Stanford. I was willing to sign up just to get those materials.

SIT: What makes these materials so special?

CIA: The unit activities are organized thematically around a main idea or a central concept. For example, in one unit, students explore a basic question in our discipline: How do historians know? Students learn how historians examine texts, eyewitness accounts, artifacts, music, and art of a period to make sense of historical events. In the unit "Taking Your Proper Station: Feudal Life in Tokugawa, Japan," students learn about social stratification and social barriers. They examine these central concepts in a variety of contexts: the physical layout of a castle town, clothing and external symbols of rank, legal codes, and central social activities such as pilgrimages to religious sites. Integrated with this social studies unit is "Voices in Japanese Poetry," a literature unit. In it, students' understanding of social stratification is reinforced through reading poetry written by ladies of the court, women who toil in the fields, merchants, and the social elite. A final example: the unit on the Maya examines the importance of time in the Maya culture and the various ways the Maya organized their society to worship time. While working through each unit, students rotate through a number of activities; this gives them a chance to examine the central concepts in various

contexts. Even if they do not understand the main idea in their first encounter, the light will go on eventually.

SIT: Some of my students couldn't care less about the Crusades, feudal Japan, or the Maya. If something isn't directly relevant or applicable to them, they just do not want to spend the energy.

CIA: It seems hard to believe, but even feudalism can be made interesting to adolescents. Using the CI model, students have opportunities to be active, to discuss, to figure things out by themselves—they therefore seem to be more motivated. Furthermore, in most activities there is a built-in project that allows them to generalize about the concept and make it relevant to them, here and now. For example, after examining a medieval song about a knight's dilemma between his duty to his king and his love for a beautiful woman, students write a song about a current event. I dreaded this activity, but the students loved it—music always wins them over.

SIT: When I did groupwork, I found that a few students usually did the work and the others just copied the answers. My students didn't really work together. They did what they usually do, except that their tables were pushed together, and they could socialize more easily.

CIA: What you describe happens when the tasks are too simple, and the answers too easy to get. When tasks are complex and open-ended and when students depend on one another to solve problems, they will more readily work together and stay on task. At first, these new responsibilities and new ways of learning took my students by surprise. As they realized I meant business, they enjoyed being taken seriously, thinking for themselves, and learning how to communicate their thoughts, opinions, and feelings. Because no single answer would suffice, students arrived at different solutions by following legitimately different paths. Open-ended, uncertain tasks increase the need for interaction, which, as you recall, leads to learning.

When I tried to adapt activities that I could use with CI, I found that this open-endedness was the most difficult for me to incorporate. We teachers tend to overspecify the tasks, to make instructions too explicit, and to assign problems that have one right answer. We are terrified that our students will make mistakes or will not "get it."

## **Multiple Abilities**

SIT: These activities sound terrific for my high-achieving kids. But other students just don't know what to do—they really have nothing to contribute. Some of them even have trouble reading the instructions and never get anything done.

CIA: You've touched upon one of the main challenges of groupwork. We really need to change the way we look at the tasks and what some kids can and can't contribute. After using CI activities, I recognized that my students have strengths and that they can be successful in

ways I never noticed before. I have learned now that if students are not the best readers or the best writers, they can make important intellectual contributions when a task is a rich, multiple ability task.

CI activities are called multiple ability activities because many intellectual abilities are necessary for their successful completion. Traditionally, students have few opportunities to show how competent they really are. With multiple ability activities, students are offered many ways of demonstrating their intelligence. Recently, even psychologists like Gardner (1983) and Sternberg (1985) have argued that intelligence is multifaceted and not reducible to a single number such as an IQ.

When students work on CI activities, they can apply many intellectual abilities in addition to the traditionally recognized academic abilities of reading, writing, and quick computation. Let us return to the unit I mentioned earlier, "How Do Historians Know about the Crusades?" During this unit, students rotate among three types of group tasks. In the first type, students examine visual representations of historical artifacts: photos and a floor plan of the ruins of a castle built by the Crusaders in Syria, Students use visual-spatial abilities to analyze pictures, hypothesize about the architectural strengths and weaknesses of the castle, and to speculate why the Crusaders chose that particular location. Next, students design and build a three-dimensional model of a castle or a fortress that will protect their group from enemy invaders. Designing this model requires careful planning, mechanical ingenuity, and translating a two-dimensional sketch into a three-dimensional model-all intellectual abilities.

In the second type of task, students use musical abilities as they listen to medieval ballads, identify the musical instruments, and describe the mood and the message of the songs. Among the intellectual abilities students use in these tasks are hearing or creating melodies, hearing and creating rhythmic patterns, understanding musical expressions, and understanding how a song's melody and lyrics play off one another.

The third type of task relies on understanding textual sources such as excerpts from Pope Urban II's speech calling the masses to join the Crusades and eyewitness accounts of the siege of Jerusalem. After thorough analysis of the text, students translate these verbal messages into different media. They create a mural, design an ad campaign for Pope Urban II, or dramatize the siege of Jerusalem from an Arab point of view. Such activities require a host of intellectual abilities: understanding sophisticated texts, detecting sources of bias in a text, being empathic, relating a single textual passage to the larger scheme of events, and translating a text's message into nonverbal forms.

I am reminded of a particularly poignant example of the importance of multiple ability tasks for heterogeneous classrooms. Doug, a resource student mainstreamed from the special day class, became the star of his group because he was the one who best understood the schematic diagram of the castle. Doug happens to be a "Dungeons and Dragons" fan. His spatial perception ability in drawing and in visual reasoning had never before been tapped in class. When his classmates recognized Doug's contribution, they relied on him to help them interpret the visual materials, to build their castle, and to present their product. It was an unforgettable day for Doug, for me, and for his classmates.

When preparing to teach a unit, I analyze the activities carefully and create a list of the intellectual abilities necessary to complete tasks. In class, I name these abilities and show the students how each one is relevant. Gradually, they learn to recognize and to name the intellectual abilities themselves. More importantly, they are able to recognize these abilities in themselves and in their classmates. For example, during the second rotation of the "African Dilemma Tales" unit, students told me which specific intellectual abilities they used to complete the activities.

#### Treatment of Status Problems

SIT: This is all very interesting, but I still have a problem when I use cooperative learning. I can see how you could fix the task so that everyone could make a contribution, but that doesn't mean that all students will. Some students are always left out and others take over the group. Let me tell you about Dusty, a student I had last year. An A-student, Dusty was used to being successful. No matter what group I put her in, she took over. It had to be her way or no way. She was so frustrated she had her mother come in and talk to me. Meanwhile, another student, Ernesto, never got to say a word. I tried every way to encourage him, but he just seemed shy.

CIA: You're describing a problem all of us must face; it is called a status problem. The difficulty with Dusty is that she expects to be the most competent person in every group, no matter what the task; everyone else expects her to be the most competent as well. That combination leads her to talk the most and to have the most influence in just about every group in the classroom. Ernesto has the opposite problem. He expects to be incompetent in the group on every new task, and the other students expect so little of him that they don't pay any attention even when he tries to join in.

These different expectations for competence come from different status characteristics that work in a classroom. For instance, Dusty may have high academic status. We rarely stop to think about this, but our students create a ranking in each classroom based on how good they think everyone is in social studies. Those who are seen as the best students in social studies will tend to dominate cooperative groups in the classroom; those who are seen as poor students, perhaps because they don't speak English well, are completely left out of small group discussions. Then there are those who have few or no friends. They have low peer status and are often treated as if they were incompetent, whereas those who are popular are listened to even when their ideas are poor.

SIT: What about differences between African-American, European-American, and Latino students?

CIA: Race and ethnicity are status characteristics, too. When you have a mixed-race or mixed-ethnic group, you may see the African-American or Latino student withdraw or be ignored. The most important thing in a classroom, however, is really how smart a student is perceived to be in schoolwork. If the minority student is a good student or is very popular, you probably won't see a status problem. Mentioning race reminds me that we also shouldn't forget about gender. By the time girls get to middle school, they are sometimes treated as low-status members of the group, unless they are strong academically or very popular.

SIT: This is an interesting analysis. I have seen this problem in my groups too, but I've never been able to figure out what to do. How do you handle it?

CIA: We can use two strategies to treat this problem. Treatments that come from sociological theory about status and research have demonstrated their effectiveness in the classroom (Cohen and Lotan, forthcoming). Using the multiple ability treatment, a teacher's job is to convince students that many different intellectual abilities will be necessary for the new group task. Of course it won't work unless you have real multiple ability tasks similar to those we talked about earlier. I take time before we get into groups to discuss with them how imagining, hypothesizing, dramatizing, reasoning, and visualizing will be necessary for the tasks they are going to undertake. Then, I always take time to say: "No one will be good at all these abilities. Everyone will be good on at least one." This is the most important part of the multiple ability treatment because it makes all students recognize that they will be good on some of the abilities and not so good on others. They realize that the group's success depends on listening to others and on taking advantage of what everybody has to offer.

SIT: Don't you feel awkward saying something like that?

CIA: I did at first, but I came to see that it was true. When you have good multiple ability tasks, kids surprise you. My resource student, Doug, astounded us all, and my A-students came to realize that they are not necessarily the best at everything—that they can indeed learn from others.

SIT: You mentioned two strategies. What is the other?

CIA: The other treatment we use is called assigning competence to low-status students. When the students are in their groups working on tasks, I go around carefully watching the groups and taking notes. I pay special

attention to those students who are usually left out of their groups. I watch for those moments when they show how competent they are on one of the multiple abilities. For example, last year when we were doing the unit on feudal Japan, I discovered that Claudine had a good idea about how to build a castle town, but her group wasn't paying much attention to her. I stepped in and said, "I see that Claudine has a good plan for laying out the castle town. She can visualize exactly how it ought to go together. I think she's a good resource for this group because she has that ability to visualize things spatially." That is a powerful treatment because I am assigning competence to her on an ability that is needed for the group to complete the task. I have done it publicly so that the other students know that I expect her to be competent. I have made it specific so that she will know exactly what she has done well. I have also made it relevant to the work of the group. These three things make this treatment work. Research has shown that teachers who use both the multiple ability and assigning competence treatments don't have problems with some students dominating the groups and others not participating (Cohen and Lotan, forthcoming).

SIT: Won't the students be embarrassed if you single them out that way? I know some of my students are so afraid to look like schoolchildren.

CIA: Your power in this case comes from the fact that students tend to believe the evaluations teachers make of them. You are being completely honest—you never do this unless the student has exhibited an important intellectual ability. You don't gush about it either. You just state it in a low-key, factual way. Sometimes I take notes on intellectual contributions low-status students make, and the next day when I'm orienting the class for cooperative learning, I share my observations from the day before. I may mention how roles were played, how effectively some groups worked together, and I slip in some assignments of competence to low-status students. This approach seems to work well.

### Breadth versus Depth

SIT: If I do everything you say, I'll never get to the end of the curriculum.

CIA: You raise a perennial dilemma in teaching social studies—breadth versus depth. Doing Complex Instruction takes more time than reading the textbook and doing seat work, but the higher-order thinking that takes place justifies the point. At the center of every CI unit is a conceptual theme. For instance, the Reformation unit is organized around the question, How do you challenge the authority of an institution? It's only by taking the time to rotate through the various group activities that students learn how a combination of factors reshape people's ideas and lead them to seek reform. One activity focuses on the role art and political cartoons play in forming and reforming public opinion, one

on the role individuals, like Martin Luther, play in catalyzing change, and one on the role the printing press, or the media, plays in spreading ideas. This is a powerful concept, one that I can use in later units, one that 8th grade teachers can tap into when they teach about the American Revolution. What my students learn goes well beyond the facts and dates of the Reformation.

After watching my students engage in CI last year, I became convinced that they were involved in many kinds of learning. They came to see major historical events as complex situations with multiple causes and consequences. To complete activities, they also had to practice making nuanced judgment about the influence of these causes and the extent of the consequencesthat's higher-order thinking in my book. Most importantly for us as social studies teachers, they came to see that big ideas or concepts in history apply to other situations. When we were studying the Reformation unit, they connected challenges to the authority of the church with their own impulses to challenge the authority of institutions like school. Best of all, some actually said, "History can be fun." I wish I had my video on these kids dramatizing Luther's challenge of the Pope-it was fabulous. I'd rather spend a few extra days on the Reformation to give my students that rich experience.

What impressed me last year was that my students remembered the Crusades in June-and we studied it in January! Such recall rarely happens. Given the benefits of this groundwork, I'm willing to devote the time it takes to these activities.

#### Evaluation

SIT: I like what you're saying, and I'd like to hang my hat on this groundwork model. What holds me back is evaluation. What do you do about grades and testing when you have groups? What do you do if students don't put forth equal effort?

CIA: I've also struggled with that question. Complex Instruction helped me reframe issues of evaluation in groupwork. Evaluation has two faces: motivation and accountability. When I had students in groups before, I graded individuals because I was afraid that if I didn't, no one would work. I used my grade book as a form of extrinsic motivation. I learned that this practice often delivers a double-blow to the low-status student-i.e., students who look as if they aren't participating may not be involved because the others in the group do not perceive that they have something to contribute and, as a result, do not let them in, will not listen to them, or do not share materials with them. Students who appear to be shy or off-task may be shut out by the others. I realize that unequal participation is more complicated than an individual deciding to check out of the group. As a result, I cannot give a student a low grade for participation when that participation may be beyond the student's control.

SIT: So how do you handle the nuts and bolts of evaluating groupwork?

CIA: First, I no longer conceive of grades as a source of motivation. Instead, I know that because the activities are intrinsically interesting, the students will stay on task. Second, I still have to structure accountability. I hold the group accountable by the presentations they make to the class. Because each activity involves a group presentation, and because most students don't want to look bad in front of their peers, they will work quite hard to have a polished product. Last year my students took great pride in their presentations and enjoyed the praise of their peers. In addition, I hold the individuals accountable in two ways. The curriculum provides individual reports for each activity. These individual reports are writing assignments that provide students an opportunity to demonstrate what they have learned in the activity. I also continue to give chapter tests. Students who participate in the groupwork will have a deep understanding of the content and, therefore, perform quite well on these tests. At Stanford they told us that 11th graders who used multiple ability tasks in a history class did significantly better on written achievement tests than students who worked only with linguistic sources covering the same historical period. That study showed that multiple ability activities made a critical difference (Bower 1991).1

#### What's Next?

SIT: This sounds terrific, but I'm feeling overwhelmed. I have so much to learn, and I don't think I can make up those multiple ability tasks without a lot of help. Suppose I want to learn more about this stuff. What can I do?

CIA: You can take several routes. It all depends on how much change you are willing to make in your curriculum and the way you run your classroom. For instance, before we attempted CI, we went for a twoweek institute at Stanford in the summer; then, during the year, CI staff developers observed us in our classrooms and sat down with us for three feedback sessions. Each session was based on three classroom visits. At the institute we learned about the theory and research behind CI and we had practical experience with students. If you were willing to commit that much time, and if we could find the funds for it, I could help you with observations and feedback because I will go for special training this year and will be a certified CI

SIT: I'd love to do that, but I'm expecting a baby in June, so I couldn't commit to something that ambitious. Is there anything else I can do?

CIA: A good way to get started is to read Elizabeth Cohen's book, Designing Groupwork: Strategies for Heterogeneous Classrooms (1986). If you find another teacher to team with, you can each design a multiple ability task, try it out, observe each other, and decide how to improve it for next year. That way, you will create at least two tasks you can share. Slowly, you can build a file of groupwork activities. In her book, Cohen tells how to manage the classroom and how to do status treatments.

#### Conclusion

In the conversation we overheard, the teachers focused on three essential components of small-group instruction: classroom organization, the nature of the curriculum, and, most importantly, treatment of status problems in heterogeneous small groups.

## Organization of the Classroom for Groupwork

Groupwork is an effective strategy when the goal of instruction is the development of higher-order thinking and conceptual understanding. In groupwork, teachers give up their traditional role. Direct supervision of students' activities in the groups becomes impractical, so the teacher delegates to students the authority to manage their groups and to complete their tasks. When teachers are advised to delegate authority to their students, they often fear losing control of the classroom. Complex Instruction, however, uses a system of cooperative norms and student roles to prevent chaos. The teacher holds both groups and individuals accountable for their learning. Groups are held accountable by the presentations they make to the class; individuals are held accountable by writing individual reports. Delegation of authority by the teacher and the installation of the management system enhances the rate of interaction in groups. Appropriate interaction furthers learning.

#### Nature of the Curriculum

To get the most out of groupwork, teachers must design or adapt learning tasks specifically for that purpose. Complex Instruction activities are organized into conceptually coherent, thematic units. By completing the various activities of a unit, students encounter the central concept in various contexts, thus gaining a better and deeper understanding. CI activities are open-ended and complex because more than one legitimate outcome and more than one way to approach and to complete the task are available to the learners. Such healthy uncertainty enhances student interdependence and increases interaction. Again, appropriate interaction furthers learning.

Most importantly, CI activities require many intellectual abilities for their successful completion. By incorporating musical, dramatic, artistic, kinesthetic, spatial, visual, and linguistic abilities, we expand opportunities for students both to show competence and to gain access to understanding the tasks. Multidimensional, multiability tasks broaden the range of opportunities for more students to be seen as smart.

#### Treatment of Status Problems

Groupwork and the multiple ability curriculum that supports it set the stage for teachers to address status problems in the heterogeneous classroom. Using Complex Instruction, teachers learn how to recognize and treat status problems. Unless teachers treat these problems, high-status students will continue to dominate the interaction and to learn more than low-status students who will be shut out from the group and will learn less. The gap will widen—the rich will get richer, and the poor will get poorer.

In treating status problems, teachers convince students that many abilities are necessary and that although everyone is good on at least one ability, no one is good at all of them. Furthermore, teachers assign competence to low-status students by making their successes public and relevant to their groupmates. Status treatments narrow the gap between the rates of interaction of high- and low-status students by raising the rates of participation of the low-status students. More balanced interaction furthers more balanced, yet much higher, learning outcomes.

Complex Instruction permits teaching at a high level in linguistically and academically heterogeneous classrooms. Although the instructional strategies described take time and effort to implement, the potential for bringing about significant intellectual growth in all students makes the effort worthwhile.

#### Note

<sup>1</sup>For more information about the curriculum developed for this study, contact Dr. Albert Bower, Teachers Curriculum Institute, 281 Carolina Lane, Palo Alto, CA 94306.

#### References

- Bower, Albert. "The Effect of Multiple Ability Treatment of Status and Learning in the Cooperative Social Studies Classroom." Ph.D. diss., Stanford University, 1991.
- Cohen, Elizabeth G. "Talking and Working Together: Status, Interaction, and Learning." In *The Social Context of Instruction: Group Organization and Processes*, edited by P. Peterson and L. C. Wilkinson, 171-87. New York: Academic Press, 1984.
- \_\_\_\_\_. Designing Groupwork: Strategies for Heterogeneous Classrooms. New York: Teachers College Press, 1986.
- Cohen, Elizabeth G., and Rachel A. Lotan. "Producing Equal-Status Interaction in the Heterogeneous Classroom." Forthcoming.
- Cohen, Elizabeth G., Rachel A. Lotan, and Chaub Leechor. "Can Classrooms Learn?" Sociology of Education 62 (1989): 75-94.
- Gardner, Howard. Frames of Mind. New York: Basic Books, 1983.
- Sternberg, Robert J. Beyond IQ: A Triarchic Theory of Human Intelligence. Cambridge, England: Cambridge University Press, 1985.