

Obstacles to Teaching in the Face of Academic Diversity: Implications for Planning for Students with Disabilities

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Running Head: Obstacles to teaching

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Abstract

Secondary teachers in public schools today are often faced with academically diverse groups of students in their classes. Students with disabilities placed in general education settings have added to this diversity. Understanding how teachers plan for meeting the educational needs of all their students is an important first step in meeting the challenge of diversity in schools.

This study was a collaborative project that incorporated the concerns and insights of 52 secondary science and social studies teachers in identifying the major obstacles in planning to teach academically diverse groups of students. These teachers participated in a series of Cooperative Study Groups (CSGs) to answer questions related to teaching and planning for their most academically diverse classes. The results of the first question posed at these CSG meetings are presented here. That question was "Thinking back on the last year of teaching, what would you say has been the most difficult obstacle that you have had to overcome in teaching science or social studies to an academically diverse group of students."

Teachers reported that lack of student motivation to learn was the single greatest obstacle in their planning and teaching. Teachers indicated that too many students exert little effort and take little responsibility in the learning process, and that students often have negative beliefs and attitudes about their ability to be successful in school. Teachers also reported that they need more support - both in finding ways to reach discouraged or disaffected students and in creating learning conditions in classrooms that enable teachers to work effectively with all students.

In general, teachers identified obstacles that were centered most frequently on variables that teachers felt were under the control of the student. Variables not under the control of the student, such as ability and skill level, and variables under the control of the teacher and school, such as teaching skills, materials and curriculum were mentioned less frequently. While these findings are consistent with previous studies of problems in teaching, they may represent a significant barrier to any change efforts that focus primarily on barriers that *teachers* do not perceive as the principal obstacles to teaching academically diverse classes.

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Increasingly, students with disabilities are being placed in general education settings for a major part of the school day (Lovitt, 1989), usually adding to the diversity that teachers encounter in public school settings. Such added diversity increases the demands on teachers to plan for individualized instruction as well as to make appropriate instructional accommodations to meet individual students' needs. On the secondary level, teachers' ability to meet these demands is diminished due to the way secondary schools are organized. For example, secondary schools have been described as the most structurally rigid in our educational system with regard to planning, adapting and individualizing instruction for students with disabilities (Brandt, 1989).

The focus of the research reported here has been on identifying the problems secondary teachers encounter as they attempt to meet the needs of all their students, including those with disabilities placed in mainstream classrooms.

In examining the research on teaching and planning, the research staff of the Institute of Research in Learning Disabilities (IRLD) selected an approach based on a collaborative research-and-development process involving teachers, administrators, and researchers. It is our belief that teachers' knowledge about their content areas and the students in their classrooms can provide critical insights into the research and development process.

This approach is also consistent with the growing recognition by educational researchers and reformers that "improvements in educational quality require working through teachers rather than around them" (Porter & Brophy, 1988, p. 74). In addition, it is consistent with the spirit of educational reform recommendations of such national research and advocacy groups as the Carnegie Foundation for the Advancement of Teaching, the Coalition of Essential Schools, and the Rand Center for the Study of the Teaching Profession. All these groups have asserted that teaching must not be regarded merely as an occupation but as a profession whose members have skills, knowledge and decision-making abilities needed to serve the educational needs of students ("Big Question," 1988; Hechinger, 1989; "Proposals," 1986).

To incorporate teacher knowledge and experience, we revised the traditional research and development process. Specifically, we established a cooperative *relationship* between our research staff and teachers for the purpose of identifying problems facing teachers of academically diverse classes and conceptualizing studies on teaching that would result in immediately usable information and products related to instructional practice. An academically diverse class was defined as a class comprised of students with widely varying achievement

levels such as a class with students with learning disabilities, other low-achieving students, as well as average-achieving students.

This cooperative relationship was operationalized through the creation of small work groups called Cooperative Study Groups (CSGs), comprised of teachers and investigators representing the research project. These work groups served as the primary force in determining the direction of research and carrying out various research activities. Teachers made a four-year commitment either to serve directly in the cooperative study groups or to support the direction of the groups by carrying out CSG initiatives. In all instances, the primary purpose of the CSGs was to explore teachers' experiences with planning for and teaching in academically diverse secondary science and social studies classrooms.

This report, which presents findings from the initial work of the Cooperative Study Groups, specifically addresses the barriers that teachers face in teaching an academically diverse class.

Method

Initiating the Cooperative Study Group Process.

An invitation to apply for project participation was extended to all secondary social studies and science teachers in two school districts in eastern Kansas. We sought teachers who were interested in jointly conducting research related to meeting the challenge of planning and teaching in the face of academic diversity.

Each teacher's class schedule and class composition was requested to determine the extent of academic diversity in their classes and to screen for students participating in special education programs. Since our goal was to identify a pool of teachers with whom we could work for the duration of the project, we also identified those teachers who had previously worked with students with mild handicaps and who would likely continue to have these types of students in their classes. Nevertheless, it was impossible to ensure these teachers would always have students with mild handicaps in their classes across the time period of this project.

Approximately 76 teachers expressed an interest in participating. However, phone calls to each applicant explaining the time commitments involved, reduced the pool of teachers to 52. Participating teachers were informed that they would become part of a research team that would meet and discuss problems and solutions as well as identify and implement interventions appropriate to the classroom setting. At the first meeting, teachers were organized into groups of four to eight. These groupings, referred to as Cooperative Study Groups, served as the basis for identifying issues and barriers in planning.

To facilitate the start-up of the Cooperative Study Groups, a set of questions related to the problems of teaching and planning for academically diverse groups of students was developed. The questions and questioning process were first discussed with Dr. Christopher Clark of Michigan State University, who served as a project consultant on teachers' planning processes, and were then piloted twice.

The first pilot was conducted with project staff, the second involved four teachers in a local school district that was not participating in the study. Based on this pilot, the questions and questioning format were modified and procedures for conducting the CSGs were developed and put into written form. Additionally, three project staff members were trained as moderators and six research assistants were trained as note takers and recorder assistants. Finally, the duties and responsibilities of note takers and recorder assistants were specified in writing.

Subjects

Fifty-two teachers participated in the first CSG meetings. For 51 of the 52 teachers for whom demographic data was collected, 25 were men and 26 were women. With a mean age of 46 years (range=31-63 years), most were very experienced teachers, having taught for an average of 20 years (range=1-36 years; $SD=8$ years); only six teachers had taught for less than 10 years. Eleven were middle school science teachers, 18 were high school science teachers, eight were middle school social studies teachers, and 14 were high school social studies teachers. Four of the teachers held part-time positions (i.e., they taught 1-3 classes per day), the remaining taught full time.

The teachers were teaching an average of 4.66 classes per day with a total average student enrollment of 107. They averaged about two class preparations per day (range=1-4) and had one class period for planning within the school day. They reported that an average of 5.7% of the students in their classes were students with learning disabilities; in addition, an average of 11% of their students could be considered at-risk for failure in school.

Procedures and Measures

Teachers were asked to meet as a group three times in the spring of 1990. The first set of meetings for 14 groups (ranging in attendance from one to seven participants) was held in February and March. The first time the teachers met for a two-hour period after school in one of the district administration offices or at a meeting room on the campus at the University of Kansas. No meeting was held in the teachers' schools. An attempt to group high school and middle school teachers separately proved feasible for seven of the 14 groups. Teachers received ten dollars in appreciation for their participation in each of the meetings.

At each meeting, participants were asked questions about barriers and issues related to teaching in the face of academic diversity. Each group was to be asked the same set of four questions. Due to time constraints, however, not all groups discussed all four questions. The first question was always presented first to each group. The second, third, and fourth questions, discussed by 12 of the 14 groups, were presented randomly across the groups to ensure that all questions would be covered and to control for possible order effects. Teachers were asked questions that required them to think of their most academically diverse class. An academically diverse class was defined as "a class comprised of students with widely varying achievement levels such as a class with individuals with learning disabilities, other low-achieving students, as well as average-achieving students." The first question asked, the question reported on here was "Thinking back on the last year of teaching, what would you say has been the most difficult obstacle that you have had to overcome in teaching science or social studies to an academically diverse group of students?"

Each question was posed, one at a time, by a researcher who served as a moderator for the group. Also present were two research assistants; one took notes about teachers' responses and the other audio taped the session. The teachers discussed each question for 15-20 minutes. When responses were no longer forthcoming, the moderator summarized (orally and in list form on a large tablet) the major points. The moderator then asked the group members to check the accuracy of the summarized statements. The teachers also were asked whether they wished to add anything to the listed responses. Any new suggestions were added to the list.

Next, the teachers were asked to indicate to what degree they agreed with each item or to what degree it represented a specific barrier or problem for them. For this purpose, they wrote down the summarized statements on a special form and indicated their agreement with each item on a 7-point Likert-type scale (ranging from "1" - "I strongly agree"- to "7" - "I strongly disagree"). This process of finalizing the list and rating the responses was referred to as the "Member Check" phase of data collection.

Teacher Evaluation of the Cooperative Study Group Process

Feedback from teachers in the Cooperative Study Group process was overwhelmingly positive. Except for a few personal problems or concerns, all the teachers indicated that they would be interested in participating in this type of research effort in the future. When asked about participating in a summer research effort, 28 volunteered.

Data Analysis

The implementation of the CSGs has yielded several types of information: basic demographic data about the teachers and transcripts of all CSG meetings. Reliability checks have been performed on the accuracy of these transcriptions. Finally, the data collected through the Member Check process have been compiled and categorized.

The data were analyzed by two methods: transcript evaluation and quantitative compilation. For the transcript evaluation process, the audio tapes of the meeting and the notes taken by the research assistant and the moderator were used to create a transcript of the meeting. These transcripts were used to interpret the meaning of items generated through the Member Check process and to identify themes and trends in the data that were not apparent from the Member Check data. The transcripts were read and major impressions were summarized by two independent readers who had participated in the Cooperative Study Group meetings. These impressions were synthesized, and a set of summary statements was generated.

After all groups had met, project staff developed categories for grouping (sorting) teacher responses. All responses in the Member Checks from the 14 CSG meetings were placed on individual 3X5 cards and grouped by the question to which they related. Each group of cards was then sorted into categories. The wide range of responses made the categorization process difficult. A procedure was developed to establish four Category headings (a) *Student Centered Obstacles*, obstacles rooted in students' characteristics, actions, or attitudes; (b) *Instructional Obstacles*, obstacles directly related to providing instruction, materials, or assessment that engage all learners and maintain their engagement and success in the learning process; (c) *System/Administrative Obstacles*, obstacles presented by organizational or structural patterns in schools; and (d) *Professional Obstacles* such as recognition, teacher morale and opportunities for professional enrichment.

A project staff member and a research assistant devised subcategories within each category as appropriate for each question. Another research assistant then sorted the cards into the developed categories and noted any difficulties with individual responses or categories. Some categories were revised in response to this feedback and some alternate choices (15.3% of all responses for this question) were allowed. Finally, categories and subcategories achieved, for this question, interrater reliabilities of 83% and 84.7% thereby verifying the sorting. These reliabilities were achieved by having two research assistants, not involved in developing the final categorization, sort responses independently into the developed categories.

Since the teachers had indicated on the Member Check forms their level of personal agreement with each item generated in their group in response to each question, it was possible to determine the relative agreement between the group-generated Member Check items and an individual teacher's viewpoint. Since Member Check items were not commensurate across groups, a method of determining within-group agreement, or the homogeneity of attitudes toward stated Member Check items within each group, was attempted. A homogeneity index was calculated for each respondent under each question by taking the standard deviation of his or her responses to the Member Check items under each question and then calculating its reciprocal, or dividing one by the standard deviation value. To determine the degree to which individuals in each of the groups were in

consensus on each question, the standard deviation of the homogeneity indexes for each respondent was calculated. This calculation was carried out for each of the four questions.

The Member Check ratings also allowed us to calculate teacher agreement with the pooled items in each subcategory. In order to analyze this level of agreement, teachers' numerical ratings for items assigned to a specific subcategory were totaled and divided by the number of teachers who had ranked those items in that subcategory. Items, or responses, with an average rating close to "1" showed that most of the teachers agreed with it (i.e., it held personal meaning for them), whereas responses having an average rating closer to "7" showed that most of the teachers did not agree (i.e., it did not hold personal meaning for them.)

Results

In response to the question, "Thinking back on the last year of teaching, what would you say has been the most difficult obstacle that you have had to overcome in teaching science or social studies to an academically diverse group of students?" teachers perceived a wide range of obstacles in teaching an academically diverse class of students. Most of those obstacles relate either directly or indirectly to (a) what teachers perceive as many students' negative attitudes toward the learning process and (b) to the wide diversity in the background knowledge and/or abilities students bring with them into teachers' classrooms.

The scope and dimensions of these obstacles will be discussed below along with other less frequently discussed but, from the perspective of individual teachers, important and pervasive problems. Appendix 1 shows the results of the Member Check analysis for this question, including the subcategories of responses, the number of responses fitting each subcategory, the number of groups contributing responses to the subcategory and the aggregate agreement rating for the items represented by each subcategory.

Student Centered Obstacles

The obstacles most frequently identified by teachers were student-centered - attributes or problems students brought with them into the schools. Within this broad category, the single most frequent, specific obstacle was the lack of student effort and/or motivation noted in 11 of the 14 groups. Related to this problem was the lack of student accountability or responsibility noted in five of the groups. In addition, obstacles arising from students' negative beliefs (about self, teachers, courses, education) were mentioned ten times across seven groups.

These findings are consistent with a number of studies about problems teachers face in regular education classrooms. For example, the Carnegie Foundation's 1990 report on *The Condition of Teaching* revealed that 46% of secondary teachers said "apathy" among students is a "serious" problem in their school (p. 3). John Goodlad (1984) reported "lack of student

interest" among the biggest problems perceived by teachers (p. 175). Ernest Boyer (1984) likewise reported teachers saying "today's students don't like to study anymore," "aren't interested in learning," "won't do homework," and "don't seem to care about school" (p. 162). Finally, in an international literature search that included 55 studies in the United States, Veenman (1984) found that motivating students was the second most frequently perceived problem of beginning teachers and continued to be a problem for experienced teachers (pp. 154, 159).

Some teachers may believe, as McLaughlin, Pfeifer, Swanson-Owens, and Lee (1986) noted, that if students lack appropriate attitudes toward learning, "teachers cannot do anything about it" (p. 422). Brophy (1985, 1987), on the other hand, asserted that student motivation to learn is an acquired competence that can be developed through experience and that may be stimulated by modeling, communication of expectations, and direct instruction or socialization. Brophy offered a "starter set" of strategies for teachers to use in planning motivational elements in their instruction. Csikszentmihalyi and Nakamura (1989) also suggested that the educator's challenge is not only to make formal learning a source of enjoyment, but also to structure "autotelic" activities that foster development of *metaskills* thereby allowing students to "focus attention on the present moment and the activity at hand" and "to define one's goals in an activity and identify the means for reaching them" (p. 66). Further, they asserted, teachers must "seek feedback and focus on its informational aspects" to achieve a balance of challenge and skill to foster student enjoyment of learning (p. 67).

Within the general category of Student-Centered problems, the second most frequently mentioned obstacle was student academic diversity, including students' varying background knowledge, abilities, classroom performance, and study- and test-taking skills. (These obstacles were identified in eight of the 14 groups). To the extent that teachers attempt to individualize instruction, providing more and better ways to do so emerges from our data as another area where teachers could use some help. Problems related to student academic diversity and individualizing instruction arose also within a second general category of obstacles -- those related to Instructional Obstacles -- to be discussed below.

The remaining Student-Centered obstacles included students' poor social behavior, such as attendance problems (six items across four groups) and students' personal, health and family problems (six items across five groups). Poor student social behavior, the most frequently perceived problem of beginning teachers according to Veenman (1984), was specifically mentioned by our relatively experienced group of teachers only six times across four groups.

Although student personal and family problems were discussed only by five groups, many teachers felt strongly that the characteristics of learners coming into their classrooms have changed significantly over a period. Thus, a growing number of students have personal and

family problems that contribute to their inability to attend to classroom learning. Similarly, the 1990 Carnegie report on *The Condition of Teaching* mentioned the "problems of society ... washing over schools, dramatically distracting and even damaging the children - reducing their motivation and capacity to learn" (p. ix). Indeed, that report described teachers' concern about their students' lives as "perhaps the most powerful theme" in their 1990 survey (p. viii).

The comments of several teachers in our groups bear out that finding. For example, one teacher observed that students with personal and family problems "could care less about what I'm saying; they are just trying to survive." Counseling services in schools may have made teachers more aware of students' personal problems. Yet, such information seems to add another challenge noted by a teacher in one of our groups: "the nurse or counselor is always coming in with kids having problems and it is hard to keep track of who's going through what at any given time." Another teacher remarked, "There's almost a need for personalized instruction to keep all kids on task."

Instructional Issues.

The second general category of obstacles centered on Instructional Issues. Here the most frequently identified obstacle was individualizing content, instruction, and materials for a wide range of abilities. Teachers were also concerned about the quality and quantity of positive classroom interactions they could maintain with all students. Some teachers worried about slower students being put "on hold" in academically diverse classrooms because the one-to-one support needed by some of those students simply was not available. Other teachers worried about "shortchanging" the brightest students.

Problems with individualizing instruction were raised across eight of the study groups. If one adds the responses related to student academic diversity included with Student-Centered obstacles in Category # 1, the frequency of this area of concern rises to 29 items across 13 of the 14 groups. Clearly, teachers in our study were struggling to figure out how to address the range of abilities among students in their classrooms. They were uncertain about what group or level to target in their instruction, citing the need for more and better materials and resources that will keep all students involved in the learning process. They reported that it is difficult "to structure things so that it is challenging for the bright kids and not too difficult for those who are struggling."

Some teachers believed that they should design "different activities to meet [the] levels of preparation of the students", noting that that "is very difficult when you do not have time to prepare different tests, activities and labs for different levels of students." Even when teachers managed this, it did not always solve all the individualization problems in their classrooms: one

of our teachers reported that her biggest obstacle in teaching to a diverse class was to maintain class cohesiveness and to avoid student resentment over differentiated assignments.

These findings are consistent with other recent studies of the problems of individualization. McLaughlin, et al., (1986) described in their ongoing study of sources of teacher effectiveness and satisfaction that problems related to the composition of classes with students functioning at a wide range of abilities headed the list of sources of teacher dissatisfaction. In fact, teachers in that study viewed the diversity in their classes as a bigger problem even than class size. Likewise Veenman (1984) found that dealing with individual student differences was the third most frequently perceived difficulty of beginning teachers and that it continued to be a problem for experienced teachers. While teachers in our study groups reported a variety of actions they undertake to address diverse educational needs in their classrooms, few, if any, seemed satisfied with their solutions.

Other Instructional Issues mentioned by teachers included: maintaining student involvement, attention, and interest and, to a lesser degree, assessment (testing and grades) and problems with materials and resources. Teachers were also concerned about content and curriculum, feeling that there is too much content to present for diverse classrooms and/or that too little of it is relevant to their students.

System/Administrative Issues.

Within this category, time constraints, particularly time to plan, emerged as a significant obstacle. Mentioned seven times across six groups, this item generated strong inner-group frequency response agreement.

Another area of teacher concern in this category was tracking and student placement. However, participants were not in agreement on the nature of this problem. Some teachers complained about too much homogeneity in their classes as better students were drained off to be placed in advanced classes, whereas other teachers felt that they had too little homogeneity and too much diversity in their classes.

Other issues identified in this category were classroom conditions and classroom availability, competing noninstructional duties, problems with the way public schools are structured, and the lack of additional help for students. Teacher/administrator relations were viewed as an obstacle only by three groups; however, the discussion of this problem in these three groups was extended and fervent.

Professional Issues

In the fourth general category, professional issues, recognition of teachers and low morale were viewed as obstacles in only one group. Two groups generated three responses,

indicating that lack of enrichment or collegial opportunities were viewed as obstacles. Inner-group agreement on these items was only moderate.

Within-group agreement results. Based on the indexes of homogeneity of attitudes toward Member Check items in each group, the groups can be divided into three categories: most consistent, moderately consistent, and nonconsistent. Table 1 lists the within-group agreement results for the 12 groups with more than one participant. Values are to be interpreted in the same manner as standard deviations, that is, low values indicate less variation and more agreement among group members, whereas high values point to more variation and less agreement. Groups #2, 5, 6, 8, 9 and 12 showed the most consensus, with a low variability in members' indexes.

Table 1

Homogeneity Indexes for Cooperative Study Group Sessions

Group	Question # 1
Group 1	*
Group 2	.03
Group 3	.64
Group 4	.45
Group 5	.17
Group 6	.09
Group 7	.36
Group 8	.09
Group 9	.13
Group 10	.46
Group 11	.74
Group 12	.14

* complete data available for only one member.

The second category, moderately consistent, consisted of Groups # 4, 7 and 10. There was moderate variability among the indexes for members in each of these groups. The third category, the nonconsistent group, was comprised of Groups # 3 and 11. The indexes observed for the group members belonging to groups in this category were highly variable.

Discussion

While teachers identify a wide range of obstacles that make it difficult for them to reach all learners in academically diverse classrooms, several patterns emerge consistently.

Specifically, teachers in our study experienced a high degree of frustration trying to simultaneously individualize instruction and make it interesting and meaningful to a lot of reluctant learners. Often they try to undertake this difficult task in the face of limited time, few adequate resources, and sometimes indifferent or insufficient public, parental, and administrative support. These problems were at the heart of the discussions in all of our groups.

Based on these observations, teachers in our study seemed to describe an important change in public education in their schools, namely, that the responsibility for learning is being shifted from the learner to the teacher. One teacher noted that "Kids have the idea that school is something to be experienced passively." Others said that the problem is "how to make material interesting so [students] think school is important;" and "I have to be a good teacher because [students] don't want to learn. So I have to make it interesting;" and "It's not that the kids are unruly; ... it's just that there is an attitude that what we're doing in class is not very important."

Where once secondary teachers were expected to teach content, they feel that they now need to justify and make relevant information before they can teach it. And then they must also find some way to individualize and keep all students involved and on task. Faced with this challenge, some teachers have begun to question the content they are asked to teach: "I look at some kids and think 'why do they need to know the parts of the cell...?'" Others recommend reducing content: "The amount of material to be covered is too great; around the world in 180 days and make it interesting."

Teachers often feel that they are wrestling with these problems alone. Isolated in their classrooms with the multiplicity of demands on their time, energy, and resourcefulness, many feel too little support from parents and from administrators. While lack of administrative support as an obstacle was discussed at length in only two groups, the sentiments expressed were strong. Some teachers complained of a lack of administrative support for their teaching efforts or for providing needed resources; others complained of the lack of leadership in establishing academics as a priority: "It is sad when a teacher has to struggle and swim upstream just to make sure academics are given more importance."

In both of the groups that discussed lack of administration support, participants were not uniformly critical of administrators. Each group contained one teacher who pointed out that he or she understood and sympathized with the criticisms expressed but that in the present situation he or she was receiving administrative support. One of these two teachers commented that progress had been made at her school because they had begun having small faculty meetings and administrators were making an effort to be present. She commented that this really helped, "just to know that they're interested. Just a little bit helps."

Conclusion

Many of the areas of concern to teachers of diverse classrooms cannot be addressed or resolved by this project. It is important to stress our findings about the difficulties posed by personal, student, and societal problems, and the even larger issue of national and local priorities with regard to education. However, our main focus is what is on teachers' minds as they try to cope with a wide range of achievement levels among their students and the implications of their concerns in planning to teach in the face of diversity. Further, within the context of a cooperative research venture, we attempt to identify and pursue projects of interest to teachers in our groups. It is also of interest to us to note what projects teachers choose to pursue. That is, given the opportunity to research a problem or develop a product designed to address a curricular need, will teachers choose the areas of concern which they identified in the cooperative study groups?

It is clear that in addressing the most difficult obstacle teachers face in teaching in diverse classrooms, teachers need more support. Specifically, as they are called upon to assume more and more responsibility for the learning process, they need information and material support in addressing the dual problems of motivating for and individualizing instruction. However, motivation and individualizing instruction are intertwined. For example, Brophy's strategies for motivating students to learn (1987) rely on "essential preconditions" that include "supportive environment" and "appropriate level of challenge/difficulty." Important aspects of Brophy's strategies as well as Csikszentmihalyi and Nakamura's metaskills (1989) are that teachers focus on assuring student success and maintaining (or developing) student self-esteem.

Planning for instruction that addresses these issues is no small feat. Yet, creating these conditions constitutes a large part of the problem of providing effective instruction for diverse groups of learners. For example, students with learning disabilities, in particular, are known to lack much of the prior knowledge needed to benefit from the secondary curriculum (Bos & Anders, 1987) and tend not to use or invent strategies to cope with specific academic demands (Ellis, Deshler, & Schumaker, 1989). Hence these students, and most likely other students as well, might profit from teacher planning that takes these deficiencies into account. Some ways this might be accomplished include more extensive use of tasks or assignments to identify what skills and knowledge students have or don't have prior to instruction. Other methods to accommodate learning deficiencies might include incorporating instruction in learning strategies alongside instruction in content. As long as some students do not know *how* to learn, motivation and success in learning will remain elusive for those students.

It is noteworthy that teachers in our groups identified mainly student-centered obstacles in teaching academically diverse groups of students - that is attributes and actions of students rather than those of teachers or administrators. These are obstacles over which teachers apparently believe they have little control. In identifying areas for further research and development in teacher planning, it will be important to keep this issue in mind because teachers are not likely to address problems they don't believe they can solve.

Teachers have also expressed a need for support in the form of time to plan and prepare for instruction as well as a greater variety of materials and resources to use in academically diverse classrooms. Because our project will continue to incorporate the expertise of teachers in the research process, it is hoped that the time spent working together can be used by teachers to share, devise, and implement planning projects and materials of their own choosing -- projects in which they will have some "ownership" and that they might not otherwise have the time or opportunity to undertake. It is also our hope that teacher involvement in the development of such curriculum plans and materials will lend to those products characteristics that allow for broad instructional implementation.

Teachers also need moral and collegial support, a need that is already being partially addressed by our project. Many participants have expressed their appreciation for the opportunity afforded by the Cooperative Study Groups to interact with professional peers and to share problems and ideas.

These and other avenues have been suggested for exploration by our conversations with teachers. It is our hope that further research and development will yield more usable information and suggestions to help teachers plan for and teach in diverse classrooms.

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Appendix 1

Cooperative Study Group Results for Question 1: Obstacles to Teaching An Academically Diverse Group of Students

Response Categories/Subcategories	No. of Items	No. of Groups (N = 14)	Mean Agreement Rating*
Student-centered obstacles			
Lack of motivation/effort	16	11	2.13
Diversity in skills, knowledge, abilities	15	8	2.52
Negative beliefs	10	7	3.05
Lack of responsibility	8	5	2.59
Personal problems	6	5	2.31
Poor social behavior	6	4	2.40
Instructional obstacles			
Individualizing for students	15	8	2.88
Maintaining student involvement	10	6	1.65
Obtaining, adapting, & using material resources	9	7	3.33
Curriculum	8	7	3.08
Assessing learning	4	4	3.06
System/administrative obstacles			
Tracking/composition of classes	10	5	3.95
Time constraints	7	6	1.97
Poor classroom conditions	6	5	2.79
Competing, noninstructional duties	5	4	3.85
Structure & operation of public schools	7	2	3.00
Poor teacher/admin. relations	4	3	3.14
Lack of additional help for students	4	3	1.67
Lack of resources	2	2	4.23
Professional obstacles			
No recognition & low morale	2	1	3.05
Poor opportunities for enrichment & collegial involvement	3	2	3.82

*(7 = Low agreement; 1 = High agreement)