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**Planning in the Face of Academic
Diversity: Whose Questions Should We
Be Answering?**

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Running Head: Planning in the Face of Academic Diversity

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Abstract

The goal of this investigation was to identify how regular high school and middle school social studies and science teachers approach teaching their most academically diverse class. Specifically, we sought to determine whether or not the typical special education model of individualization could be part of the framework for approaching academically diverse classes. Information from this study will serve as the basis for conceptualizing interventions that will enable regular classroom teachers to better plan and teach students with mild handicaps.

Fifty-one teachers were given questionnaires and asked to participate in a series of Cooperative Study Groups. Fourteen Cooperative Study Groups were created from the pool of teachers. At the initial meeting, participants answered four questions related to teaching and planning for their most academically diverse classes. The results of the questionnaire and the initial round of Cooperative Study Group meetings are presented here.

In general, we found that the goal of improved planning for students with learning disabilities who participate in regular classrooms must be accomplished within the realities of the secondary-school setting and content curriculum. Participants indicated that their willingness to individualize depended on the level and extent of individualization required and the impact of such individualization on the rest of the students in the class. Based on these findings, a new paradigm for planning for mainstreamed students with disabilities at the secondary level appears to be needed.

A Research Initiative on Planning in Secondary Mainstream Classes

One of the most heavily debated topics among both regular and special educators has been the integration of students with disabilities into mainstream classes. In recent years, this debate has been carried out within the context of the Regular Education Initiative, or 'REI' (Will, 1986), according to which pull-out programs for students with disabilities are ineffective and therefore, these students should be placed in mainstream settings for as much of their schooling as possible. REI proponents suggest that, if students with disabilities are to be successfully integrated into mainstream settings, regular classroom teachers must individualize instruction to deal with the unique learning deficits presented by these students (Graden, Zins, & Curtis, 1988). Thus, finding answers to questions about how teachers should plan for, manage and evaluate teaching when they have students with disabilities in their mainstream classes has become paramount.

The task of planning, adapting, and/or individualizing instruction for students with disabilities is particularly challenging in secondary schools because of the curricular and structural features of these settings (Schumaker & Deshler, 1988). In an analysis of classroom pedagogy in public schools, Cuban (1984) concluded that elementary and secondary schools differ markedly in the complexity and amount of content students face, in the allocation of time for instruction, and in the external pressures imposed on schools from other institutions. While elementary schools primarily emphasize the mastery of basic skills, secondary schools focus on the acquisition of content information. The Excellence in Education Movement that gained momentum in the 1980s took note of the markedly increased expectations concerning the amount of content to be covered by secondary teachers (Boyer, 1983; Goodlad, 1984; Powell, Farrar, & Cohen, 1985). Thus, secondary teachers' role as "content experts" has gained added emphasis in recent years; secondary content teachers are encountering new pressure to remain current with regard to curricular content.

Additionally, the amount of contact time between students and teachers at the two levels varies significantly. In elementary schools, the self-contained classroom is the dominant mode of instructional delivery in regular education. Elementary teachers spend about five hours each day with the same group of 25 students. In contrast, high school teachers and some middle school teachers see five groups of 25 or more different students for less than one hour per day. Contact time would appear to be an important variable related to understanding, planning for, and addressing individual student needs. Furthermore, in the elementary school, having the same group of students for most of the day gives teachers more flexibility to adjust instruction to meet individual needs, to

compensate for absences, and to provide additional assistance or adaptations than in the secondary school (Schumaker & Deshler, 1988).

These curricular and structural differences between elementary and secondary schools are marked. Specifically, secondary schools differ from elementary schools in their mission, the ways in which the teachers are trained, how teachers perceive their role, and the reduced flexibility teachers have for creative programming given the period format of secondary schools. In short, affecting how classroom teachers plan and act to promote the learning of students with disabilities appears to be more challenging at the secondary than at the elementary level.

This challenge has prompted educators to seriously seek an understanding of how teachers can respond effectively to the demands of having increased numbers of students with disabilities in their mainstream classes. One effort was originated at the Office of Special Education and Rehabilitative Services (OSERS) within the U. S. Department of Education. In the spring of 1989, OSERS issued a Request for Proposals (RFP 84.023) entitled, "Research on General Education Teacher Planning and Adaptation for Students with Handicaps." This federal funding initiative was designed to support research projects that would lead to improvements in the ways teachers plan, individualize, and adapt curricula and instruction for students with handicaps who are educated in general education classrooms.

In a project funded under this RFP, a research team at the University of Kansas Institute for Research in Learning Disabilities (KU-IRLD) has for the past two years been studying how secondary teachers plan in the face of academic diversity. The focus of the research has evolved as the project has progressed. Initially, the research questions framed in the RFP were used to conceptualize issues associated with teacher planning at the secondary school level. These research questions were based on the notion that the difficulties of teacher planning for students with disabilities in secondary mainstream classrooms could be solved if regular classroom teachers became more aware of the unique characteristics and instructional needs of students with disabilities and subsequently designed individualized instruction to address these characteristics and needs. The problem was largely conceptualized within a "diagnostic-prescriptive framework" (Lerner, 1976) used by special educators for years. Thus, the authors of the RFP initially viewed the approach to teacher planning for students with disabilities in mainstream settings largely from a special education perspective. That is, the projected approach included targeting the student(s) with the disability, gathering data on their unique learning/behavior characteristics, individualizing or making accommodations in instruction for the student(s), evaluating students' responses, to the modified instruction, and further

adjusting subsequent instruction. Since this model has been successfully applied in special educational settings (Meyen & Skrtic, 1988), its application to other educational settings seemed reasonable.

However, the results of early KU-IRLD research on teacher planning in secondary mainstream settings strongly indicated that the RFP perspective did not take into account many of the important realities facing secondary teachers. The first indications of this problem emerged during a pilot study to generate a set of questions for interviewing secondary teachers about their teaching practices with students with disabilities. Participants in this effort were four regular middle school science and social studies teachers judged by a special education teacher in their school to be highly effective with students with learning disabilities. The open-ended questions presented to these teachers in a small-group discussion format reflected the special education perspective emphasized in the RFP. For example, participating teachers were asked: "How do you promote remembering within your class for those students who have difficulty?" or "How do you individualize assignments that you give to students?"

The teachers' responses to these questions were very revealing. First, they expressed a relatively high level of awareness about and sensitivity to the learning difficulties faced by students with disabilities. Second, while showing concern for these students, teachers indicated that they were unable to effectively meet these students' needs, given the realities of secondary mainstream settings: big class sizes, large total student loads, limited time for instructional planning, and heavy teacher involvement in extracurricular activities. The information gathered in the pilot study made apparent the need to restructure the focus of the questions used to understand the dynamics of teaching in the face of academic diversity in secondary mainstream classes. In short, KU-IRLD researchers concluded that secondary teachers should be asked questions that would allow them to describe the complex realities of their instructional situation as well as how they view individualization, given their values and the constraints they face as secondary mainstream teachers.

Commitment to a Cooperative Research Process

As a result of the findings of the pilot study, the emphasis of the initial phase of the KU-IRLD planning research was altered. From a predominantly special education perspective, the focus changed to that of the regular educator.

Through discussions about this new perspective with Dr. Christopher Clark, a consultant to the KU-IRLD project, a dynamic approach to the research and development process was conceptualized, involving secondary teachers as active participants. Such an

approach is 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). It is also consistent with the spirit of education reform recommendations by national research and advocacy groups such as the Carnegie Foundation for the Advancement of Teaching, the Coalition of Essential Schools, the National Network for Educational Renewal, and the Rand Center for the Study of the Teaching Profession. The cooperative approach is based on three assumptions: (a) the quality of instructional practices will be greatly enhanced when teachers and administrators are allowed and encouraged to be collaborators in the research and development process; (b) teachers' knowledge about their content areas and about the students in their classrooms provides critical insights that can be revealed only over time; and (c) only teachers who want to change and desire to serve as active agents in the change process are likely to change.

Based on these assumptions, the KU-IRLD staff adopted a research process involving a *cooperative relationship* to be established and developed between researchers and practitioners. This relationship would have the following characteristics:

1. Teachers would volunteer to become part of a research team that would exist for several years for the purpose of opening a dialogue about mutually important research questions on teaching and learning. Teachers would be invited to participate in different aspects and on different levels of the research process.
2. The assistance of volunteer teachers would be enlisted in solving problems that have traditionally complicated the process of conducting school-based research in schools and in translating such research into practice.
3. Teachers, administrators, and researchers would collaborate to develop studies that would result in immediately usable information and products related to teaching.

Two types of research efforts were conceptualized within the context of the cooperative research process. The first type, qualitative research, focuses on building a relationship in which researchers and practitioners work in tandem. The second type of research involves investigating specific problems and interventions through careful control, manipulation, and observation of variables.

As a major vehicle for carrying out this research process "Cooperative Study Groups" were created. These groups have served as the basis for identifying issues and barriers related to planning for student diversity and field testing specific educational interventions. For the qualitative research, teachers have been asked to meet in small-group sessions and talk about their experiences and problems in teaching. As the need for

interventions has emerged, teachers have been asked to participate in specific research studies.

The remainder of this paper discusses the methodology used to gather data from secondary teachers through the Cooperative Research Process. In addition, the results of the initial phase of the data collection, involving one Cooperative Study Group meeting, is presented. (Additional data have been and will continue to be collected through further Cooperative Study Group meetings and in the Cooperative Research Process over a four-year period.)

Methods

Subjects

An invitation to participate in this cooperative research project was mailed to 308 social studies and science teachers. This number represented all teachers for these subjects in grades 6-12 in two school districts in eastern Kansas. The project was described as an investigation of methods for planning and teaching academically diverse groups of students. Fifty-one teachers volunteered to participate in the initial Cooperative Study Groups. Their mean age was 46 years (range=31-63 years), and their average teaching experience was 20 years (range=1-36 years; $SD=8$ years). Twenty-six of the teachers taught science and 25 taught social studies/history at the secondary level. Twenty were teaching at the junior high/middle school level, and 31 at the high school level. Twenty-five were men, and 26 were women. Four of the teachers held part-time positions (i.e., they taught 1-3 classes per day) while the remainder held full-time teaching positions. The teachers were currently teaching an average of 4.66 classes per day, with a total average of 107 students enrolled in those classes. They averaged 2 class preparations per day (range=1-4) and had one planning period within the school day. They reported that an average of 5.7% of the students enrolled in their classes were students with learning disabilities and that an average of 11% of their students could be considered at-risk for failure in school.

Procedures and Measures

The planning questionnaire. A questionnaire was designed to collect basic information from the teachers about the time they spend planning, the kinds of planning activities in which they engage, their beliefs about placement of handicapped students in their classes, and their preferences related to class composition. Some items on the questionnaire were open ended (e.g., How much time do you spend planning outside of the school day?), others required the teachers to estimate the percentage of planning time they spend in different activities; yet others required the teachers to rate on a 7-point Likert-type scale how much they agreed or disagreed with a particular statement. A final question

involved a hypothetical situation requiring the teachers to assign different types of students to class periods across a school day.

Questionnaires were distributed to teachers at the first Cooperative Study Group meeting. They were returned to project staff by mail.

Cooperative study group meetings. The teachers were each assigned to one of 14 study groups, ranging in membership from four to eight teachers. Group assignments were based on participants' after-school schedules. For this initial Cooperative Study Group meeting, no attempt was made to organize the groups by grade level or subject area. The group meeting was held as long as at least one member attended. Each group met once at an administrative building in the school district. Four questions were discussed:

1. 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?
2. Think for a moment of the most academically diverse class that you have taught. For example, think of a class that might be comprised of students with learning disabilities or other low-achieving students as well as average-achieving students. Now think about the biggest challenge the class presented to you. What actions did you take or could you have taken to meet this challenge?
3. What would you say are the biggest barriers in planning to teach students who are considered to be at-risk for school failure, including students with learning disabilities, low achievers, and students who are likely to drop out of school?
4. When you plan for teaching in the face of academic diversity in student achievement, what do you plan?

The first question was always asked first, while the others were presented in random order across the groups to ensure that all the questions would be covered. As a result, Question 1 was discussed by all of the groups; Questions 2, 3, and 4 were discussed by 12 of the 14 groups. The teachers received ten dollars at the end of the meeting; they were not told ahead of time that they would receive the money.

The session started with an overview of the purpose of the meeting, and a discussion of issues related to the teachers' participation in the Cooperative Study Group Process and their role in an ongoing team research process. The first research question was then described: to identify the barriers and issues surrounding teaching in the face of academic diversity. An academically diverse class was defined as "a class comprised of students with widely varying achievement levels, that is, individuals with learning disabilities, other low-achieving students, as well as average-achieving students." Next, each of the four questions was posed, one at a time, by a researcher who served as moderator. Also present

were two research assistants; one took notes about the teachers' responses to the questions, the other audio taped the session.

The teachers discussed each question for 15-20 minutes. When no further responses were forthcoming, the moderator summarized (orally and in list form on a large tablet) the major points expressed. 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 items 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 presented a specific barrier or problem for them. For this purpose, they wrote down the summarized statements on a 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 responses was referred to as the "Member Check" phase of data collection.

The data derived from this meeting were analyzed using two methods: a transcript evaluation process and a quantitative compilation process. For the transcript evaluation, the audio tapes and the notes from 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 in 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.

The responses generated in the Member Check phase were compiled through a sorting and grouping process. After all 14 group meetings, each of the teachers' responses from the Member Check lists was transferred to a card. Four major categories were developed for sorting responses to Questions 1, 2, and 3: (a) **Student-Centered Issues** -- items related to student characteristics, actions, or attitudes; (b) **Instructional Issues** -- items related to providing instruction, obtaining materials, and assessing students' skills and knowledge to ensure the engagement and success of all learners in the learning process ; (c) **System/Administrative Issues** -- items related to the organizational or structural patterns in schools; and (d) **Professional Issues** -- items related to teacher recognition, morale, and opportunities for professional enrichment. For Question 4, three categories were developed: (a) **Factors That Influence the Planning Process**; (b) **General Planning Methods** -- responses related to the teachers' general approach to planning; and (c) **Specific Planning Targets** -- those features of instruction that are considered in the planning process. In addition, subcategories were established within

each category to better identify particular issues and concerns. All member check statements listed in response to each question were sorted into the categories and subcategories by project staff.

To determine the reliability of assignments to categories and subcategories, two researchers who were not involved in the initial sorting independently sorted all responses and their assignments were then compared item by item to the original assignment of responses. To be scored as an agreement, a given response had to be assigned to the same category and subcategory in both sortings. The number of agreements was divided by the number of agreements plus disagreements and multiplied by 100 to obtain the percentage of agreement. The percentage of agreement on category and subcategory assignment was as follows: Question 1 - 84%; Question 2 - 85%; Question 3 - 93%; and Question 4 - 74%.

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 the questions, 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 in 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 dividing one by this 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 then calculated. This calculation was carried out for all questions.

The Member Check ratings also allowed researchers to calculate teacher agreement with the pooled items in each of the subcategories. 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 the response (i.e., it held personal meaning for them), whereas responses with average ratings closer to "7" showed that most of the teachers did not agree with them (i.e., it did not hold personal meaning for them).

Results

Planning Questionnaire

The Planning Questionnaire provided basic information about the way teachers plan for teaching academically diverse classes and their beliefs about placement of handicapped students in their classes.

Time for planning. When "instructional planning" was defined as "the time you spend preparing for your classes excluding any time spent for grading and scoring tests and assignments," the teachers reported that they spend an average of 38 minutes per day ($SD=24$) planning during school hours and an average of 76 minutes per day ($SD=58$) after school, for an average total of about two hours of planning time per day. Further, they estimated spending an average of 32 minutes per day ($SD=25.25$) planning for their most academically diverse class compared to an average of 30 minutes per day ($SD=23$) for their least academically diverse class. Finally, they estimated spending an average of 42 hours planning during the summer months (Range=0-168 hours.; $SD=43$).

When asked to estimate how they allocate the time they spend planning for their most academically diverse class, teachers responded that, on the average, they spend 59% of the time planning for the entire class, about 18% for the average achievers, about 14% for the lowest achievers, about 12% for the highest achievers, and 11% for specific individuals. (Since teachers reported spending about 32 minutes for a diverse class, the last percentage translates into teachers spending a total of about 3.5 minutes per day considering the individual needs of particular students in an academically diverse class.)

Types of planning. The teachers agreed that planning for a class period was the most important type of planning. The next most important type was planning for a unit, the least important planning for a year. When asked to allot percentages of time spent on particular planning activities for a new course for an academically diverse class, the teachers reported that they spend the most time, in descending order, on: (a) determining what content is critical for all students to know ($M=15.6\%$); (b) deciding how to organize content for teaching ($M=11.0\%$); (c) translating instructional decisions into classroom activities ($M=10.1\%$); (d) developing ways for the students to understand the new information ($M=10.0\%$); and (e) developing ways to motivate students to learn ($M=9.7\%$).

They reported spending the lowest amounts of time on: (a) developing new ways to help students remember new information ($M=5.8\%$); (b) determining what students might already know about the content ($M=5.7\%$); and (c) planning how to reteach information not learned in previous lessons ($M=4.7\%$). When asked how they would allocate planning time for a course they have taught many times but that now includes an academically diverse group of students, the responses were similar to those for the new course, with the exception that the activity on which they would spend the most time was developing ways to motivate students.

Teacher beliefs. The teachers were asked to rate on a 7-point Likert-type scale how much they agreed or disagreed with a number of questionnaire items related to their

acceptance of mainstream students, the potential for success of mainstreamed students in their classes, whether they plan for mainstream students, and whether they feel effective with these students. Figure 1 shows the teachers' mean agreement ratings on these items. None of the ratings was in the "Agree" (6) or "Strongly Agree" (7) range. Questionnaire items with which the teachers most strongly agreed (their agreement can be considered to be within the "Slightly Agree" range) included: "Mainstreamed students are welcome in my classes"; "Mainstreamed students experience academic growth when mainstreamed"; "Mainstreamed students experience social growth when mainstreamed"; "Mainstreamed students can get an "A" in my class"; "I take time to structure learning activities so mainstreamed students will benefit"; "I am willing to plan for the academic growth of special education students"; and "I believe that my planning techniques for mainstreamed students need improvement."

INSERT FIGURE 1 ABOUT HERE

In contrast, teachers disagreed the most with statements that mainstreamed students negatively affect their classes academically, that the quality of mainstreamed students' work is the same as that of regular education students, that planning for mainstreamed students' growth is impossible, and that few materials are available for use with mainstreamed students. The teachers' ratings with regard to their effectiveness with mainstreamed students fell in the "4" range, indicating that they did not feel particularly effective or confident in working with this population.

Class composition. For this item, the teachers were asked to respond to a hypothetical situation in which they were given fixed numbers of students in four categories (10 mildly handicapped, 20 low achievers, 50 average achievers, and 20 high achievers). They were told to pretend that these students were to be placed in one of four sections of the same class and that they could assign them to any of the four class periods that they taught. The only stipulation was that they had to assign every student to one of the four class periods. Table 1 shows the mean number of each type of student assigned to each class period as well as the standard deviations. As illustrated, the teachers preferred a heterogeneous over a more homogeneous class composition since the different types of students were assigned to the class periods in relatively equal numbers.

While most of the teachers completing this item on the questionnaire ($n=48$) assigned students in a manner that produced heterogeneous grouping, four teachers (8.3%) assigned students such that one of each teacher's classes was completely homogeneous. Three of these four teachers placed all 20 high-achieving students in a single class. One of these

teachers chose their first period class for this homogeneous grouping while the other two teachers chose to teach a homogeneous class the last period of the day. The fourth teacher constructing a hypothetical, homogeneous class assigned 25 average-achieving students to the third class period of the day. Three of the four teachers described above as well as nine other teachers (24%) assigned students to some or all of the four class periods by grouping students in two adjacent categories. This kind of homogeneous grouping occurred more frequently in class periods later in the school day.

Table 1

Means and Standard Deviations for Class Composition

Type of Student	Class Periods							
	1		2		3		4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Mildly Handicapped	4	2	4	2	3	1	2	1
Low Achievers	6	2	6	2	6	2	5	2
Average Achievers	13	2	12	3	14	4	13	4
High Achievers	6	2	6	2	6	2	8	4

After teachers had assigned the students to the four classes, they were told that in the next hypothetical situation they had two planning periods. They were asked when they would prefer to schedule those planning periods. Given a choice, teachers were equally divided between having planning time before their first class ($n=26$) and between their second and third classes ($n=25$). In general, teachers noted that they preferred their planning time earlier in the school day.

Cooperative Study Group

Two types of results are available for each of the questions discussed in the Cooperative Study Group meetings: Member Check results and transcript analysis results. For the Member Check, results will be presented in terms of (a) the categories and subcategories of teachers' responses; (b) the number of responses, or items, included in each subcategory; (c) the number of groups discussing items related to the subcategory; (d) and the level of teachers' agreement with items listed in their group's Member Check statements.

The results of the transcript analysis will be presented as subjective conclusions based on the content and length of the discussions on particular items, group members' nonverbal reactions and the levels of emotion expressed in responses.

Question 1: Obstacles to teaching in the face of academic diversity.

Table 2 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 in each subcategory.

The most frequently mentioned obstacles were Student-centered Obstacles. In 11 of the 14 groups, the teachers mentioned their students' lack of motivation and effort. Teachers were also concerned with the diversity in skills, prior knowledge, and general ability that they face among their students as well as the negative beliefs students hold about themselves as learners, students lack of responsibility toward completing their work, their lack of social skills and their inappropriate classroom behavior, and students' personal problems, including health and family.

With regard to Instructional Obstacles and System/Administrative Obstacles the teachers expressed frustration at the need to gather and adapt materials and resources for their _ students and problems associated with presenting content that is irrelevant for their students. One of their biggest challenges was deciding what to include and what to leave out of lessons. For some of the groups, this struggle with "too much content" was a major theme. Time constraints seemed to be particularly bothersome, too, and teachers mentioned their other school duties as major obstacles.

Professional Obstacles, including no recognition for accomplishments, low morale among teachers, and poor opportunities for enrichment, were mentioned infrequently in response to this question. Overall, the most agreement among the teachers (i.e., on the 7-point scale) seemed to center around obstacles related to maintaining student motivation and involvement, time constraints, and obtaining additional help for students.

Transcript analysis for Question 1 revealed four major themes. First, consistent with the Member Check analysis, student motivation appeared as the biggest obstacle to effective teaching. Indeed, the focus on student motivation was so strong in most of the groups that it was the first item mentioned and appeared as an underlying theme throughout the discussions.

Table 2

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)

Second, when general academic diversity was discussed, the diversity of students' background knowledge about the content being studied clearly evoked the most nonverbal agreement.

Third, while only two groups mentioned low teacher morale and the absence of recognition, these topics evoked highly emotional responses from group members whenever they were mentioned. For example, the teachers noted that they felt they were not treated as

professionals with highly honed skills; they felt devalued in our society. Similarly, lack of administrative support was identified as an obstacle to teaching in the face of diversity in only two groups (only one of which was one of the two groups that discussed low morale), but the sentiments were strong. Some teachers complained of a lack of administrative support for their teaching efforts, whereas others spoke of a lack of leadership in their schools to establish academics as a priority.

A fourth obstacle that teachers cited frequently and with emphasis was that they had too much content to cover during the school year given the diversity of their classes. Although this item was most often included within a Member Check subcategory related to "curriculum" barriers, it was also mentioned in conjunction with items in other categories.

Question 2: Actions taken to meet the biggest challenge presented by diversity in the classroom. Table 3 shows the teachers' responses to Question 2 generated through the Member Check process. Most of the responses to this question fell in the category of Instructional Actions. Eight groups indicated that they used varied activities to accommodate diversity. Nine of the groups reported that they used motivational techniques (primarily involving some sort of extrinsic rewards), seven mentioned the use of different student groupings such as cooperative group structures and peer tutoring, whereas six of the groups stressed "interesting" whole-group presentations. Other techniques such as adjusting assignments or having students choose their assignments, providing additional materials to supplement the textbook, using fewer tests and more projects, and carefully structuring instruction were also mentioned.

System-Related Actions, such as moving students out of their classes and obtaining extra help for students, and Professional Actions, such as obtaining additional education for themselves, were mentioned infrequently. Further, no Student-Centered Actions were mentioned.

In general, the most agreement across the responses centered on using different student groupings, modifying curriculum goals so that less content was covered, obtaining extra help for needy students through school resources, attending inservice training sessions, and working more hours.

Transcript analysis for Question 2 revealed seven major themes. First, although the Member Check process suggested that a variety of teaching techniques were used, the transcripts indicated that only a few teachers mentioned planning a variety of activities for specific individuals. Instead, the teachers reported using a variety of activities over time, with the whole class participating in each activity. Further, the teachers commented that they were not likely to accept or try a "new" activity unless they were sure the students would like it or accept it. The high school teachers reported that they discard activities if

the highest achieving students' motivation or interest starts flagging. Thus, they were not willing to sacrifice the learning of the high-achieving students in order to accommodate low-achieving students.

Table 3

Cooperative Study Group Results for Question 2: Actions Taken to Meet the Biggest Challenge Presented by Diversity in the Classroom

Response Categories/Subcategories	No. of Items	No. of Groups (N=12)	Mean Agreement Rating*
Instructional actions			
Using a variety of activities	19	9	2.77
Using motivational techniques	15	11	2.60
Using whole-group methods	15	8	2.42
Using different groupings	13	8	1.75
Using textbook & materials creatively	13	8	2.47
Using different teaching methods	9	7	3.89
Changing the class climate/structure	8	5	3.01
Adjusting assignments	7	5	2.19
Modifying curriculum goals	6	4	1.78
Using techniques to modify student behavior	5	3	2.25
Using more structure	4	4	2.29
Modifying evaluation processes	3	2	2.14
System-related actions			
Changing student placement	3	3	2.46
Obtaining extra help for students	3	3	1.86
Professional actions			
Attending workshops	1	1	1.75
Working extra hours	1	1	1.50

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

Second, providing entertaining or interesting presentations was mentioned as a common solution to dealing with a diverse class. Specifically, the teachers reported spending a great deal of energy planning and delivering "entertainment" to enhance student motivation to learn.

Third, the most common example of a specific action endorsed by the teachers in meeting the challenge of a diverse classroom was organizing the class into small groups to

complete a task. Specific examples usually involved various forms of cooperative learning activities.

Fourth, the teachers stated that they believed they were accommodating student differences by giving students choices with regard to assignments and projects.

Fifth, when the teachers mentioned having special education teachers come into their class to assist, to individualize, to re-explain, or to provide alternate tests and materials for mainstreamed students, some middle school teachers reported that mainstreamed students did not like being singled out for this additional help. In addition, they said that other students in the class question the fairness of students getting individualized attention, adjusted tests, and alternate assignments. In essence, these teachers pointed to a loss of the "classroom as a community" with the addition of "in-class" extra help for mainstreamed students.

Sixth, reducing the amount of content specified in the curriculum was also frequently mentioned as a way to deal with diversity. This action was affirmed by nonverbal agreement from many of the group members when it was proposed. The teachers noted that they did not make this action generally known, however, because of the pressures that they feel to teach more content.

Seventh, the teachers discussed and rejected individualization as a method for handling diversity, indicating that they do not have enough information about students to individualize instruction for them. Although all the teachers seemed genuinely interested in helping mainstreamed students with learning disabilities, they also were concerned about the other at-risk students in their classes. In fact, they indicated that they felt compelled to help the other at-risk students instead of the mainstreamed students because the mainstreamed students were already receiving individual help and support from special education teachers.

Question 3: Barriers to planning for at-risk students. The results of the Member-Check process for Question 3 are shown in Table 4. Responses to this question fell in three broad categories: Instructional Barriers, System Barriers, and Student-Centered Barriers.

The majority of responses concerned Instructional Barriers, such as finding and matching materials and resources to students with differing skills and interests; finding ways to promote student involvement, motivation, and completion of tasks; finding ways to accommodate individuals with differing learning styles and skills; and teachers' own lack of knowledge about individual students. The System Barrier most frequently mentioned was inadequate time for planning. In terms of student-centered barriers, motivation and absenteeism were cited, since teachers cannot be sure whether students will be present in

class and can be activated to learn when they are present. The barriers on which the teachers seemed to agree the most were related to promoting student motivation, keeping up with students and content, time constraints, and parent communication and support.

Table 4

Cooperative Study Group Results for Question #3: Barriers to Planning for At-risk Students

Response Categories/Subcategories	No. of Items	No. of Groups (N=12)	Mean Agreement Rating*
Instructional barriers			
Finding/matching materials to students	11	7	2.11
Promoting motivation	8	6	1.80
Individualizing instruction	7	5	2.46
Lack of knowledge about individual students	5	4	2.09
Lack of knowledge about techniques	2	2	2.57
Keeping up with content and students	2	2	1.75
Keeping current in field	2	2	2.57
Lack of teacher drive to do more	1	1	1.00
System/administration barriers			
Time constraints	10	8	1.91
Poor conditions for in-school planning	5	5	2.47
Problems with team planning	3	3	3.21
Competing school duties	2	2	1.71
Too many preparations	1	1	2.86
Lack of additional help for students	1	1	2.33
Student-centered barriers			
Poor motivation	4	4	1.94
Absenteeism	3	3	2.33
Inadequate parent communication & support	3	2	1.40
Poor use of time	1	1	2.25
Negative beliefs	1	1	2.00
Short attention span	1	1	2.33

*(7 = Low agreement 1 = High agreement)

Transcript analysis revealed four major themes. First, the biggest barrier to planning appeared to be lack of adequate time. However, teachers frequently stated that they did not use their planning periods during school time to plan, especially due to the poor environmental conditions in schools for planning. They cited lack of space, unavailability of time and a place for quiet thinking, and lack of opportunities to team with others teaching

similar kinds of courses. In essence, time to think about their content and to develop ways to teach it effectively was considered a luxury.

Second, the teachers most often talked about not knowing what to plan because of the diversity of their classes; the differences in students' background knowledge and skills usually leads to some students getting tasks done early while others do not finish. The teachers expressed frustration with knowing how to plan for such widely disparate types of students.

Third, while teachers frequently mentioned the problem of inadequate materials, their comments were usually related to disappointment with their textbooks, and many of the teachers admitted that they only used the textbook as a supplement. They reported that finding other ways to present the information was easier than trying to adapt the textbook for students with widely disparate skills and knowledge. As a result, teachers appeared to take on the responsibility of creating personalized materials, thereby adding to their planning load.

Fourth, several times teachers mentioned a hesitancy to restrict their instruction to the major concepts that they perceive to be the most important. They expressed frustration with constantly having to sacrifice quality for quantity and with having to constantly weigh decisions about how to achieve both quantity and quality while realizing that they would come up short in both areas. They suggested that if they felt that they had permission to target major concepts for instruction and to eliminate content they perceived to be less important, their planning would be easier.

The issues of the amount of content that has to be taught and the selection of important concepts within that content emerged as major problems in the discussion of this question as well as Questions 1 and 2.

Question 4: Planning to teach an academically diverse group. Table 5 shows the results of the Member-Check process related to Question 4. The teachers' responses could be grouped into three broad categories: Factors Influencing the Planning Process; General Planning Methods; and Specific Planning Targets.

The teachers indicated that they plan according to the time available for instruction. In addition, their planning is influenced by the time available for planning. Teachers reported using a variety of resources in planning, including consultation with colleagues and personal training and experience. With regard to general planning methods, teachers in five of the groups reported planning the organization of the content. Other responses indicated that some teachers rely on mental or spontaneous planning while only a few mentioned using written plans.

The targets of planning fell into 13 areas. In eleven of the groups teachers mentioned the importance of planning activities for their students, while in nine groups teachers noted that they focus on planning the content to be covered. Half of the groups mentioned planning motivational techniques and materials to be used; less than half listed planning objectives, outcomes, teaching techniques, strategic teaching methods, variety, flexibility, managing the classroom, planning according to their own interests, and planning methods for evaluating students' progress. A great deal of agreement was found across teachers related to planning targets, with planning for variety yielding the highest mean agreement rating.

Table 5

Cooperative Study Group Results for Question 4: Planning to Teach an Academically Diverse Group.

Response Categories/Subcategories	No. of Items	No. of Groups (N=12)	Mean Agreement Rating*
General planning methods			
By organization of content	7	5	2.59
By other methods	18	9	2.19
Factors influencing the planning process			
Resources	9	7	2.51
Conditions	8	7	2.57
Time constraints	5	4	1.80
Specific planning targets			
Activities	19	11	1.75
Content/skills to be learned	13	9	1.95
Materials	10	6	2.08
Motivation	9	6	1.65
Techniques	8	5	1.65
Objectives	6	5	2.54
Outcomes	6	4	2.25
Strategic teaching	5	3	1.81
Evaluation/Testing	3	3	1.62
Variety	3	3	1.27
Flexibility	3	3	1.70
Management/Climate	3	2	2.60
Teacher's interests	2	2	1.55

*(7 = Low agreement 1 = High agreement)

Transcript analysis of the responses to Question 4 revealed three major themes related to planning. First, few teachers reported that their in-school planning periods were useful for planning; instead, they indicated that they had to use this time for "paper-pushing" tasks or attending to other school responsibilities. Often, because their classrooms were not available during their planning hours, they had no place to plan. As a result, the most valuable planning took place in the shower, in the car on the way to work, or walking in the woods. In other words, teachers referred to the times when they were able to capture solitude in their busy lives as the most productive times for planning. Formal "sit down" planning during school hours did not seem to contribute much to their actual planning work during the school year.

Second, although only a few responses revealed that teachers work cooperatively with others while planning, the entire group's reaction was positive whenever this notion of collaborative planning emerged. Discussions of shared lunch periods and planning periods showed that teachers who enjoyed such arrangements were envied by the others. However, in addition to collaborative planning opportunities, most teachers expressed a need for opportunities for solitude and quiet time to do their planning. In general, it was agreed that time for planning provided during the school day was used for "top structure" planning (e.g., scheduling activities, assigning students to groups), while "deep structure" planning (e.g., determining how to elaborate on a difficult concept, developing new activities) takes place away from the school or when teachers' attention can be completely focused on the task.

Third, since in-depth planning is considered a luxury, teachers tend to use opportunities for such planning for special or favorite projects or activities. Specifically, they seem to enjoy mulling over decisions related to these activities and to spend considerable amounts of time planning the right way to implement an activity or to form student groups in order to make them as effective as possible.

Within-Group Agreement. Based on the homogeneity indexes designed to measure variation in attitudes among group members toward listed Member Check items, the groups can be divided into three categories: most consistent, moderately consistent, and nonconsistent. Table 6 lists the within-group agreement results for the 12 groups having more than one participant.

Values are to be interpreted in the same manner as standard deviations: low values indicate less variation and more agreement among group member ratings of Member Check items, whereas high values reflect more variation and less agreement. Only one group (group #2) was in the most consistent category, demonstrating the most consensus among all the groups' with complete data available. The variability observed in members' indexes was low and remained constant across items for which there were data.

Table 6

Homogeneity Indexes for Cooperative Study Group 1 Sessions

Group	Question			
	1	2	3	4
Group 1	*	*	*	*
Group 2	.03	* *	.26	.07
Group 3	.64	.63	.33	.27
Group 4	.45	.16	.19	*
Group 5	.17	.26	.47	.49
Group 6	.09	.87	.19	.34
Group 7	.36	.15	.36	.24
Group 8	.09	.71	* *	* *
Group 9	.13	.16	.54	.53
Group 10	.46	.65	.42	.26
Group 11	.74	.06	.86	* *
Group 12	.14	* *	* *	.13

* Complete data for only one member available.

** Question not discussed by group.

The second category, moderately consistent, consisted of Groups #5, 7, 10, and 12. There was moderate variability among the indexes for members in each of these groups. Variability was also demonstrated across items.

The third category, the nonconsistent group, was comprised of Groups #3, 4, 6, 8, 9, and 11. The indexes for the members in the groups in this category were highly variable. The variation in the indicators of index deviation (the table values) ranged from low on some items to high on other items. This indicates that for these groups, there was consensus on some items and not on others; also there was no distinguishable pattern regarding the items for which there was and was not consensus.

Discussion

The information generated in the initial phase of this collaborative research project has provided a number of insights while also raising a number of questions related to the planning by secondary regular educators for the education of individuals with disabilities in mainstream settings.

1. *Is Diversity an Asset or a Liability in the Classroom?* It is not clear whether teachers view the diversity of the secondary classroom as an asset or liability in the teaching process. Within the context of the class composition task, teachers constructed heterogeneous classes; however, in the group discussions, preferences for both homogeneous grouping and heterogeneous grouping were expressed. On the one hand, some teachers argued that academic diversity in class composition encourages opportunities for peer support and discussion, and that tracking students in the form of remedial, modified, or advanced placement courses inhibits the instructional process. Similarly, some argued that the absence of the more able students in a class reduces stimulation for the entire class. In addition, teachers of either advanced placement classes or remedial classes did not seem happier about their teaching situations than did teachers of more heterogeneous classes. On the other hand, teachers cited academic diversity of their classes as a major problem, and some teachers of homogeneously grouped classes appeared satisfied with that arrangement.

Some of the teachers' comments shed light on how they might be thinking about this issue. Thus, stated preferences for a diverse class seemed to center on the notions that (a) high-achieving students can help low-achieving students; and (b) classes can be more interesting and stimulating when high-achieving students are included. Preferences for diversity seemed also to be based on the notion that grouping classes heterogeneously reduces the amount of teacher preparation because instruction can be geared to a subgroup of the class (e.g., the teacher can choose to teach to the middle of the class). A heterogeneously grouped class appeared to be associated in the teachers' minds with an implied permission to target their instruction for the academic "middle" portion of the class. In contrast, the same course taught several times each day to classes composed of students homogeneously grouped at a different level would require increased preparations and a greater knowledge of students' abilities. Therefore, academic diversity might be preferred only because planning for a variety of homogeneously grouped classes might be more difficult than planning for a series of heterogeneously grouped classes.

2. *What Does It Mean to Individualize and How Can It Be Done?* In relation to the academically diverse class, teachers viewed individualization very broadly. Attempts to individualize instruction were manifested in three ways: (a) providing students with options or choices, (b) organizing subgroups within the class of peer-assisted learning, and (c) planning entertaining or interesting presentations to make information more meaningful to individual students. Teachers seemed willing to address classroom diversity in these ways until they felt that the motivation or interest of the most able students in the class began to drop. Therefore, attempts to respond to academic diversity seem to be evaluated in terms of the motivational response of high-achieving students. Although most

of the teachers appeared to agree that their job is to teach all students, they seemed willing to agree only to the extent that motivation can be maintained for those who are already succeeding in learning.

Nevertheless, the teachers in this study did not appear to be happy with the notion of abandoning the lowest achieving students. Instead, they reported being very frustrated with the feeling that they have to make a choice between reaching the high or the low achievers. They appeared to be genuinely concerned for both low-achieving students and students with mild handicapping conditions in their classes. This was evident in the group discussions and in their questionnaire responses. However, they saw the problem of individualization within the context of meeting the needs of individuals while also meeting the needs of the group.

Many teachers explained that the reason they were participating in this project was their frustration over how to solve the dilemma related to choosing one group of students over another. One teacher, in trying to describe her frustration and attempts to respond to the needs of students, said, "I struggle to teach them; what happens when you try to teach all the students is you have students who really belong, sitting there rolling their eyes. Individualization was a goal in my student teaching, but life isn't like that; I teach 170 students each day."

3. *Planning Efforts Must Have Concrete Applications.* The teachers supported the notion that the conditions and circumstances in secondary schools and the secondary curriculum present challenges that are unique and different from both the skill-oriented environment of the elementary setting and the intensive diagnostic-prescriptive environment present in traditional special education programs. The amount and the quality of planning time available to these teachers suggest that the planning that they do have time for must have a broad impact and be widely useful and relevant. Therefore, efforts to change the way teachers plan in order to increase the learning of students with learning disabilities and other low-achieving students must take these conditions into consideration.

4. *How Can Information about Student's Prior Knowledge Best Be Used?* These teachers were interested in learning more about their students, expressing a desire for information about their students' skills, experience, and knowledge, which is not readily accessible. The teachers reported that it was often well into the school year before they were able to identify which students had been placed in the wrong type of class or discovered that a student needed special attention.

Nevertheless, when they were asked to estimate the percentage of time spent on particular planning activities, consideration of students' prior knowledge was an activity on which they spent little time. The reason for this choice is unclear; it may be related to the

time available for planning and learning about their students, to the number of students they have in their classes, or to the difficulties of handling prior knowledge concerns during interactive teaching. However, because these teachers indicated that their lack of information about "what students already know" is a major obstacle to planning, this area needs to be explored further.

5. *"Around the World in 180 Days and Make It Interesting!"* This comment from one of the teachers in the discussion groups typifies a frustration expressed frequently in the Cooperative Study Groups - namely, the curriculum from which secondary teachers teach and the amount of content that has to be covered is a major problem. In special education, the amount of information to be learned is not as critical as how a student learns and the fact that the student learns something about the subject. For the content teachers in this study, however, getting through the curriculum was viewed as necessary. While some teachers reported that they did not use the available text, they also stated that they made every attempt to cover the critical content. As a result, teachers seemed to be saying that they were willing to accept surface level understanding of the content because deeper level understanding was not an option, given the demands placed upon them. Middle school teachers appeared to express more flexibility in adhering to content outcomes than did high school teachers. High school teachers emphasized the specter of ACT and SAT scores as a backdrop to their stories of struggling to meet the needs of an academically diverse class. Nonetheless, most of the teachers said they believed that distinguishing important content from unimportant content is possible. As described in other research on planning (Clark & Peterson, 1986), content selection is one of the first planning decisions teachers make. Such decisions are driven by a variety of beliefs about learning and teaching related to whom teachers anticipate teaching, what they are supposed to be teaching, and for what reasons they are teaching the targeted information. Thus, teachers appear to need methods for analyzing their content and deciding what to teach given their particular teaching circumstances.

6. *Student Motivation.* Throughout the discussions, the teachers frequently mentioned the student's motivation as a major concern. This emphasis is consistent with findings in a number of studies about the problems teachers face in regular education classrooms. In fact, 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 among beginning teachers and continued to be a problem for experienced teachers. Similarly, the Carnegie Foundation's 1990 report on *The Condition of Teaching* revealed that 46% of secondary teachers say "apathy" among students is a "serious" problem in their school. Therefore, considering secondary teachers' planning

without considering the demands they face with regard to motivating students would probably be a grave mistake.

7. *How Do Teachers Plan?* The planning process used by secondary content teachers seems to have some unique features. Specifically, the teachers indicated that their planning is a cognitive activity that is rarely recorded on paper. They plan in snatches of time stolen from their busy days during the school year. Their work on major instructional problems and problems associated with diversity is restricted to days when they can spend uninterrupted time mulling over the problems. The summer seems to be a prime time for this kind of activity. Planning was described as an ongoing process that takes place over a long period of time during which teachers engage in reflection and move toward decisions. At various points, actions may be taken such as gathering new materials or creating a new activity. Whether this planning process is fixed or whether it is a function of the conditions in secondary teachers' lives is unknown. Future research is clearly needed to better characterize this process and to determine whether or not it can (or should) be modified.

While the research project focused on obstacles to planning in the face of academic diversity, teachers at times identified obstacles to teaching in general. Often these obstacles encompassed problems beyond the scope of this project, such as low teacher morale, lack of administrative support, and students' personal problems. Perhaps we too often overlook that teachers are frequently called upon not simply to teach, even while accommodating individual differences among students in skills and background, but also to accommodate or attend to the social and personal problems experienced by many students in our society today. Our questions to teachers were directed at the fairly specific targets of teacher planning in the face of diversity, yet these other issues only peripherally related to planning kept rising to the surface. Clearly, these concerns are on teachers' minds.

Therefore, as the process of planning is examined, the daily reality of these problems and concerns for teachers must also be considered.

In conclusion, the model for promoting planning for individuals with disabilities within the regular classroom setting originally articulated in the federal RFP initiative and later conceptualized by the KU-IRLD research staff does not seem to fit the realities of secondary educational settings. Regular classroom teachers at the secondary level are not likely to accommodate the needs of individuals at the expense of other students in their classes. The costs and benefits of individualization cannot be evaluated only in terms of the achievement of students with handicapping conditions. Such factors as a positive classroom culture, the amounts of content that must be covered, and the motivation and achievement of *all* students in the class must also be considered.

Because the teachers appeared sincere in their desire to be effective with students with disabilities and other at-risk students, all is not lost. The task of educators and researchers is to create a new paradigm within which secondary teachers can plan to respond to the needs of at-risk students within the larger context of mainstream educational environments. This new paradigm must at least fulfill the following requirements:

1. It must take into consideration the realities of secondary schools, teachers' lives, and available time.
2. It must take into consideration that teachers tend to plan in snatches of time during the school year and in blocks of time during the summer.
3. It must be possible to perform cognitively with a minimum of paper work.
4. It must promote the motivation and learning of *all* the students in the class.
5. Positive reactions in the students must be observable by the teacher.
6. It must not single out individual students as "different" from the others in the class.
7. It must take into consideration the widely differing abilities, knowledge, and skills of the students in an academically diverse class.
8. It must enable the teacher to make efficient content and activity decisions.
9. It must enable the teacher to efficiently gather information about the students.
10. It must enable the teacher to make information in textbooks accessible to students of widely different abilities. and
11. It must be personally satisfying to the teacher.

Although this list of factors is based on initial work in this research project, many of the findings are similar to findings reported elsewhere in the literature about teacher planning.* Clearly, the results of this project need to be evaluated after additional meetings of the Cooperative Study Groups and after the completion of other phases of the Cooperative Research Process have been completed. In the meantime, a prudent response to the findings presented here would be to frame research questions in such a way as to ensure that studies of the planning processes of secondary teachers address the factors that have been identified by the teachers themselves. Developers and researchers can expect teachers to adopt and use

* Relating the findings of this project to the literature is beyond the scope of this paper. However, a research report for each of the questions addressed in this article is being written in which the findings are discussed in relation to other work.

innovative planning practices only by addressing teachers' concerns as a part of the development process.

Epilogue

Comments on this report were sought from teachers participating in the first set of Cooperative Study Group meetings. Draft copies of the report were mailed to all current project participants who were asked to review the report and discuss it at a Cooperative Study Group meeting. The teachers were also asked to provide any written comments on the report. Twenty-one teachers did so, including 19 who also attended the meetings. A total of 30 teachers attended the study group meetings.

While a number of teachers raised questions in their written comments about particular statements or issues in the report, all but six teachers explicitly stated their agreement with the contents of the report. None of the teachers indicated, either in their written comments or in oral comments at the meetings, that they disagreed with the report's observations or conclusions. Several teachers expressed pleasure and occasionally surprise that the report had represented their views so accurately, given the wide-ranging nature of the Cooperative Study Group discussions. Typical comments included such remarks as "I really didn't realize so much had been accomplished" and "I think this paper fairly accurately portrays our sentiments and the conclusions were excellent." A number of teachers also expressed gratitude that they were being listened to: "[I] did not realize (though I hoped) you would really reflect our fears, hopes, frustration and desires."

Critical comments from the teachers were all carefully noted by project staff. The final report was revised to clarify any observations or conclusions that had seemed unclear to some teachers or that teachers felt were not adequately emphasized. Criticisms related to specific facts or statements were noted, rechecked, and revisions made as needed.

The discussions at the Cooperative Study Group meetings affirmed several of the conclusions in the report. Teachers in four of the five groups repeated their ambivalence about heterogeneous versus homogeneous grouping. While some were reluctant to see their remedial classes abandoned, believing that students in those classes benefit from the more protected environment of homogeneous grouping, others viewed diverse groupings as vital for providing stimulation even for high-achieving students who are, they argued, occasionally too preoccupied with grades to fully explore learning opportunities.

Discussions in the groups also raised again the concern of a number of teachers that both administrators and researchers often do not take into consideration the realities of day-to-day classroom teaching. One teacher commented, "You have no idea how gratifying it was to know that you really honestly thought that maybe things were different than what you

thought they were and that you were willing to adjust and try to get closer to what was reality." The teachers also expressed pleasure in discovering in this report that many of their concerns about teaching were shared by other teachers and that their planning methods were similar to those used by other teachers.

Overall, in addition to yielding insights into the planning practices of teachers of academically diverse classes, the cooperative research process has also initiated a productive and satisfying relationship between a group of researchers and a group of teachers.

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Figure 1. Teacher beliefs and action with regard to mainstreamed students.

