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Deciding to Differentiate Instruction in Middle School: One School's Journey

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Abstract

As many schools move toward serving a broad range of students in heterogeneous settings, it is important to assist teachers in developing classrooms responsive to the needs of academically diverse learners. Understanding what impedes and what facilitates appropriately differentiated instruction is essential for educational leaders if schools are to move away from one-size-fits-all teaching and if heterogeneous classrooms are to become viable for "academic outliers" such as gifted, struggling, and special education learners. This case study examines the experience of one middle school confronted with a district mandate for differentiated instruction and presents the factors which impeded or facilitated their movement toward appropriately differentiated classrooms.

"That students differ may be inconvenient, but it is inescapable. Adapting to that diversity is the inevitable price of productivity, high standards, and fairness to students" (Sizer, 1984, p. 194). Over time, American schools have sought various solutions to dealing with student diversity, including academic diversity.

In recent years, many voices in education have called for reduction or abandonment of homogeneous grouping of students by ability. Advocates for more inclusive classrooms make their case based largely on equity of learning opportunity (e.g., Kozol, 1991; Oakes, 1985; Page, 1991; Slavin, 1987; Wheelock, 1992). Use of heterogeneous grouping is especially commended by proponents of a middle school philosophy (Carnegie Task Force on the Education of Young Adolescents, 1989; National Middle School Association, 1992). Simultaneously, a philosophy of inclusion has become prevalent in the field of special education (Hallahan & Kauffman, 1994). As a result, many advanced and struggling learners who once had special learning needs addressed through special classes and/or resource room programs are now served almost entirely through the regular heterogeneous classroom.

Well-documented in the literature of schooling is a tendency to "teach to the middle," or to develop and deliver a standard, one-size-fits-all curriculum in American schools (Darling-Hammond & Goodwin, 1993; Goodlad, 1984; Welsh, 1986). Research indicates that regular classroom teachers make very few modifications in their instruction for gifted learners (Archambault et al., 1993; Westberg, Archambault, Dobyns, & Salvin, 1993) or for low performers (Bateman, 1993;

International Institute for Advocacy for School Children, 1993; McIntosh, Vaughn, Schumm, Haager, & Lee, 1993).

Thus an issue with the broad movement toward heterogeneous grouping is whether teachers can and will appropriately address academic diversity in the regular classroom or whether the teach-to-the-middle practice will continue to prevail. It is important to understand what occurs when a school attempts to ensure appropriate differentiation of instruction based on students' learning needs. Insight into what facilitates teacher adaptation for academic diversity may well be a first step in determining whether heterogeneity can succeed in the long term for gifted learners, as well as for other students with diverse needs.

Method

Qualitative case study research is appropriate for exploring and interpreting educational phenomena in a real-life setting when "how" and "why" questions are the focus of the study, when multiple sources of evidence will be used, when multiple views of reality are likely to exist, and when the boundaries between the phenomenon to be studied and the setting in which it occurs are blurred (Glesne & Peshkin, 1992; Merriam, 1988; Yin, 1989).

This exploratory qualitative case study sought to understand how middle school teachers responded to a school district initiative to differentiate instruction for academically diverse students through a heterogeneous classroom. It also probed why various teachers responded to the initiative as they did.

Putting the Research to Use

If a school or district goal is to establish classrooms in which regular classroom teachers effectively address needs of academically diverse learners, intensive and sustained staff development will be required. Teachers need assistance in developing a rationale for differentiated instruction, help and support in unlearning entrenched patterns of whole-class instruction which assume that all students need to learn the same information in the same way at the same time and over the same duration, and ongoing support as they develop new ways to think about their students and instruction. Staff development has an opportunity to model differentiation for teachers, building on their readiness, interests, needs; engaging in individual goal setting; establishing individual timelines; and assessing individual progress, just as differentiated teaching would ask them to respond to the differing profiles of their students.

The case studied was Midland Middle School (pseudonym). Data were gathered by the author through prolonged engagement (Lincoln & Guba, 1985) with Midland staff, parents, and students over an 18-month period which included three school semesters and a summer staff development institute. Data sources and methods included interviews with teachers, administrators, students, and parents (totaling 28 hours); classroom observations (totaling 30 hours); attendance at and participation in teacher team meetings (totaling 11 hours), faculty meetings (totaling 4 1/2 hours), and staff development sessions (totaling 34 hours); and documents (e.g., district memos, teacher lesson plans, assignment handouts for students, and letters and notes from teachers and parents to the researcher). All data collection and analysis were conducted by the author. Triangulation via multiple sources and methods allows flexible study of emerging themes and increases the credibility or trustworthiness of findings (Lincoln & Guba, 1985). An audit trail of data and data analysis has been preserved and includes tape recorded interviews, transcripts of the interviews, original notes from observations, field notes, field documents, the researcher's reflective journal, records of evolving themes, and drafts of all figures.

Interviews were tape recorded, except in one case when a teacher requested that the recorder not be used. Transcribed recordings, field notes, and researcher memos generated throughout the research period were hand coded and ultimately analyzed for recurring coding categories (Bogdan & Biklen, 1982) leading to themes (Strauss, 1989). At several points in the research process, member checks (Lincoln & Guba, 1985) were used with some Midland teachers and students to verify or extend researcher understanding. In addition, preliminary findings were repeatedly shared and discussed with individual teachers and administrators as well as small and large groups of district administrators and Midland staff.

As researcher, I was a participant observer (Bogdan & Biklen, 1982). During the first 6 months of the study period, my role was more toward the observer end of a continuum as I interacted with informants only to conduct interviews and observe classrooms and meetings. In the later months of the study, teachers and administrators began actively seeking dialogue and information regarding differentiation of instruction from me, and my role shifted toward that of participant in the process. In the context of "workshop dialogues" and staff development sessions conducted both by me and by Midland administrators, I had the opportunity to hear, record, and ultimately understand questions and thinking of teachers about developing differentiated classrooms at a much more specific and detailed level than would likely have been the case had I persisted only with formal interviews and classroom observations.

Background of Midland as a Research Site

Midland Middle School is in a relatively affluent community in the upper midwestern United States. Teacher salaries are high compared with those of many districts, resulting in a

stable and experienced teaching staff. The student population contains a large number of high-ability or advanced learners, as well as students with learning problems. In this instance, the terms *high-ability* or *advanced* will be used to designate students (a) identified by the district by virtue of multiple criteria including scores at least 2 years above grade level on local norms for standardized achievement tests (local norms in Midland are well above national norms), teacher recommendation, and grades or (b) identified by teachers through classroom performance as being ahead of classmates in skills and knowledge for the subject studied. The terms *students with learning problems* or *struggling* will refer to students (a) identified by a professionally qualified child study team based on observations of the child, individually administered diagnostic instruments, and parent input as having special learning needs such as learning disabilities or mental retardation or (b) identified by teachers through classroom performance as being behind classmates in skills and knowledge for the subject studied. Although the school and district conducted formal assessment of student achievement and aptitude for special services, teachers in heterogeneous differentiated classrooms also became diagnosticians for student readiness for specific tasks—thus the two-pronged definitions.

In the past in the Midland district, homogeneous grouping was employed as a means of addressing academic diversity. As is the case with many school districts, leaders in the Midland schools have more recently embraced movement toward heterogeneity, believing that it is possible to serve a wide range of academic needs in such settings while simultaneously avoiding the social stratification of students which may result from homogeneous groupings. Midland has not relinquished all homogeneity or special services for advanced or struggling learners but has moved markedly in the direction of heterogeneous classes in which teachers will serve academically diverse populations.

Following recommendations from a community study committee regarding services to academically diverse learners, the Midland Superintendent of Schools took the stance that if heterogeneous classrooms were to be effective, they would have to do more than pay lip service to addressing the needs of students with broadly differing academic profiles. Thus the Superintendent and the School Board mandated that the Midland district focus efforts and resources on ensuring that appropriately differentiated instruction would take place in its classrooms and that teachers in those classrooms develop and use skills of differentiation of instruction.

Midland Middle School had a staff of approximately 50 and a student body of approximately 550 in Grades 6 through 8. Among schools in the Midland district, Midland Middle School seemed to move most directly toward working with teachers to differentiate instruction in heterogeneous classrooms. Heterogeneity is a hallmark of middle school philosophy, and Midland Middle School administrators expressed a clear belief that such an initiative was appropriate for middle schools in general and their school in particular.

Midland was an attractive research site, then, because there was broad leadership support for ensuring that heterogeneity did not become an opportunity for one-size-fits-all instruction. Furthermore, its teachers were skilled: its staff was stable; it provided ample resources for teachers and students; and its students were relatively unassaulted by poverty, violence, poor discipline, drugs, and similar circumstances which can make both teaching and learning more difficult. It seemed to be, in many ways, a best case scenario for addressing academic diversity in a heterogeneous setting. As a Midland administrator noted, "If we can't pull this off here where we have excellent staff, strong student bodies, cooperative parents, and experts to help, then there's probably not a lot of reason to be optimistic it'll happen anywhere."

The Midland study yields generous information. Following are key insights which should be helpful to educational leaders whose role it is to assist teachers in moving toward differentiation of instruction in academically diverse classrooms. Teachers' voices are used to provide dimensionality and reality to researcher insights. Sections in the report begin with comments from Midland Middle School staff which in some way represent a prevailing view about the topic of the section.

Need for Differentiated Instruction

"We're producing good test scores, so isn't that enough?"

In the early days of the differentiation focus at Midland Middle School, many teachers expressed a clear conviction that single-size schooling as it was largely practiced at Midland was "working" and that there was little need for significant adjustment in instruction for academically diverse learners. Some educators were direct in their opposition to the idea of differentiation. Sometimes the objections were based on satisfaction with the status quo. "We're doing a good job here. We have high test scores. Parents are satisfied. I don't see any students complaining." Sometimes objections arose from an inability to grasp how differentiation would work in practice. "My job is to make sure every kid gets the material. How do I do that if they don't all do the same thing?" "How am I fair if I jiggle my expectations for different students?" "It makes no sense. Theoretically, a kid could spend a whole class on one problem. But we have this text to cover."

Other Midland educators (fewer at first) expressed support for the concept of adapting instruction in response to learner needs. "If we don't have homogeneous classes any more, then we have to figure out a way to meet kids where they are in the heterogeneous class." "We are trying to look beyond a class and see individual kids, and beyond a textbook to see individual needs." "Differentiation belongs in middle school because the middle school wants to focus on the child." "In our mission statement, we say we have the interest of students at heart and that we are going to move kids along at the best level of challenge for them. We've said that. I'm not sure we really mean it." Another teacher explained: "Kids start at different points and we are supposed to help them stretch and be

successful from those various points. That's so easy to say—and so hard to do." A third teacher reflected a similar sentiment: "We spend a year on our textbook. I know some of my kids could finish it in half a year. Others need 2 years. I don't know how to do that without making somebody look bad."

If educators differed widely in their acceptance of the idea of differentiated instruction early on, there was unanimous support for the idea among students interviewed who were advanced or struggling in a given subject, and among the parents of such students. One student who was well beyond grade level expectations in several subjects explained: "Our book in social studies is really easy. It just doesn't tell us much stuff about anything." Another said, "All you have to do in science is skim the chapter and the test is so easy you get 100." A third reflected, "Our project is pretending to be Zeus, and you don't really have to know anything to do it. The project has no substance." Another student who seemed to have a grasp of differentiation misdefined explained: "Sometimes when our teachers try to do different things, they just give me *more* stuff. I wish they'd give me *harder* stuff [emphasis in voice]. I'd really like a challenge."

A student who struggled because of a learning disability said: "Sometimes I get really frustrated. I want to ask the teacher to stop talking and let me work a little longer on something. I think I could get it then." Another student who found academics difficult felt a better academic fit in a special services resource room than in her regular classes: "I'd feel lost without the Learning Center. Somebody there can always help me figure out a different way to do things. They have different books and all. They let me take my time, too. My classes aren't like that, though."

A parent mused: "Sometimes I feel like he's considered a burden, a threat. It's sad if a child feels he has no control in a classroom. What adult would want to stay in that situation?" Another parent reflection also pointed to the need for instruction modified to meet the unique profiles of academically diverse learners. "I want my child to be appreciated for his best efforts, to learn to face and overcome a true challenge, to handle frustration and disappointment. These are important skills he's not learning in a classroom. He has learned to do the bare minimum and to be praised for his lack of effort."

Midland began a journey toward modifying instruction for academically diverse learners with varied degrees of staff resistance and openness to the idea, and with a general lack of understanding of how to make differentiation a reality, even when the idea itself made sense to them.

A Need for Clarity of Definition

"Does this mean putting the smart kid in the next book?"

One contributor to the ambiguity regarding differentiating instruction in the early phases of the initiative was that there was no widely disseminated definition of differentiation from which all parties could operate. Thus a continual refrain from teachers was, "Nobody knows what differentiation means." The lack of a common definition was clear. "Does differentiation mean en-

richment or acceleration for the high-end learner? Does it mean slowing down the same material or using different material for the learner who finds the work too difficult?" "Do we let kids make choices or do we choose for them?" Along with ambiguity, there was misconception: "If we differentiate instruction, we'll just lower standards because we won't let anybody fail."

In the absence of an operational definition, the most often repeated assumption among Midland teachers was, "We already do that." One teacher explanation typified many: "Good teachers have always differentiated instruction. It's really nothing new for us, except somebody downtown gave it a new name."

An interesting early finding of the research at Midland stemmed from the we-already-do-that stance. Because so many teachers asserted in interviews the pervasiveness of differentiated instruction in the middle school, I began observations with the expectation that I would see many examples of differentiated instructional practice. In fact, I found almost none. Knowing that the teachers were not being untruthful in their assertions, I concluded that our definitions of differentiation must differ. I then began asking each teacher prior to an observation, "When I see you differentiate instruction in your class today, what will I see?" The majority of teachers could readily tell me. What they called differentiation is what Shulman (1987) called individualization or tailoring. Using the analogy of a clothes rack, Shulman suggested that differentiation of instruction involves a teacher's understanding that different learners will require different sizes of garments (different input or content, different process or sense making, and/or different products or output) based on their readiness to learn. Such a view of differentiation assumes that a teacher will take a proactive stance—planning a variety of modes of learning, understanding, and expressing learning; assessing student readiness; matching learning options to student interest and need; using flexible groupings to ensure both challenge and equity; creating a flexible learning environment; assisting students in personal goal setting; serving as coach or mentor to students in reaching their goals; and assessing student progress based on individual goals and growth.

At Midland, what staff called differentiation was much more reactive than proactive. That is, there was pervasively a single lesson for all students—the same content, process, and product. However, if students indicated a need for adjustment in the lesson, the teacher would make minor modifications. For example, when a strong writer took her descriptive paragraph to the teacher to indicate that she had completed the assignment, the teacher whispered to her, "You seem to be okay with this, why don't you go back and add some dialogue." When a student in math indicated with considerable frustration that he "couldn't get" the problem, the math teacher said it would be, "okay for [him] to take it home and bring it back tomorrow." When a social studies student asked if she could word process her report, the teacher gave approval. In addition, teachers explained that they differentiated instruction by grading some students "a bit harder than others, so the kid

who's having trouble is rewarded for trying and the kid who knows a lot doesn't get off too easy." Although this sort of individualization or tailoring is a kind of microdifferentiation and certainly shows more flexibility and awareness of students than a nondifferentiated classroom (see Figure 1), it nonetheless allows teachers to persist with a one-size-fits-all classroom and likely does not meet the academic needs of students for whom the pace of instruction is far too slow or too fast, for whom the amount of content is overwhelming or underchallenging, for whom different modes of processing ideas is essential, or for whom group goals are discouraging in their complexity or simplicity. It is certainly problematic when students rather than teachers bear the responsibility of prompting a lesson modification since some students elect to mask their learning differences or lack the skills or temperament to be a catalyst for change in the classroom.

A second finding which emerged from charting various enacted views of differentiation was that creating a differentiated classroom is not a yes/no proposition but rather a continuum along which teachers move as they develop skills of responsive teaching. That is, only a few teachers appeared largely inflexible in addressing student differences. Far more teachers were moving in the direction of developing strategies to acknowledge students' academic diversity. Even in that group, some teachers made fewer curricular and instructional modifications and others made more. In Midland, it was helpful for teachers to see the continuum (Figure 1), find their own location on it, and use it as one way to determine personal next steps in modifying instruction based on student needs. One teacher noted, "I feel better because I can see that I have already been growing and developing in the ways I teach, and I also feel better because I can get a sense of where I might go next." The continuum indicates that movement toward a more robust or macrodifferentiation is additive. That is, individualization or microdifferentiation will continue while new strategies are added to address students' interests and needs. "What we've been doing is a start, isn't it," one teacher said, "it's just not the end."

A working definition of differentiating instruction in Midland has now been developed and broadly discussed and disseminated. Differentiation has come to mean "consistently using a variety of instructional approaches to modify content, process, and/or products in response to learning readiness and interest of academically diverse students." The presence of a common definition earlier in the process might well have moved the discussion forward more quickly.

Barriers Built, Barriers Removed

"If they expect us to cover a certain number of chapters in a year, well then, differentiated instruction is a problem."

Asking teachers to move from a single-size classroom to one more accommodating to the learning needs and styles of academically diverse learners in heterogeneous classrooms was frightening to many Midland teachers because it indicated a need for major change in teaching practices. Change is

disorienting and upsetting. Said one teacher: "We're supposed to be doing this because we're worried about the kids' self-esteem. Well, what about my self-esteem?" One response to potential change is to negate its usefulness. Teachers at Midland created a noteworthy list of "yes buts." "I don't see how they can expect us to have several things going on in rooms that are too crowded already." "If they want us to do this, they'll have to do a lot better with giving us materials." "I don't see how they can expect us to differentiate instruction when there are all those kids with all those needs in one class." "Middle school kids need more structure, not less." "We're doing too many things already."

While the list of detractors reflected an initial hope that the plan for differentiated classrooms at Midland would crumble under its own weight, the list also reflected salient concerns and genuine impediments. Understanding the conditions perceived by Midland staff as barriers to differentiated classrooms

was essential in understanding the support needed by teachers in order to develop classrooms responsive to individual learning needs. Barriers perceived by Midland staff can be classified as (a) administrative issues, (b) issues of changing expectations, and (c) issues of professional support. In each instance, barriers also implied solutions, or at least countervailing approaches which might facilitate the goal of developing appropriately differentiated heterogeneous classrooms. A digest of key barriers and facilitating actions follows.

Administrative Barriers

Administrative barriers here mean those decisions made or actions taken by central office or building administrators which teachers perceived to be out of their control.

• **Top-down versus bottom-up decisions**—One administrator noted that the differentiation initiative in Midland was a top-down mandate, "reflecting a community reality, not a textbook change model." Another said, "Telling teachers

Figure 1
A Continuum of Differentiated Instruction Found Among Midland Teachers

NO DIFFERENTIATION	MICRODIFFERENTIATION	MACRODIFFERENTIATION
Class works as a whole on most materials, exercises, projects	Adjusting questions in discussion	Articulated philosophy of student differences
Group pacing	Encouraging individuals to take an assignment further	Planned assessment/compacting
Group grading standards	Implied variations in grading expectations	Variable pacing is a given
Implied or stated philosophy that all of the students need same teaching/learning	Students pick own work groups	Moving furniture
	If students finish work early, they can read, do puzzles, etc.	Planned variation in content/input
	Occasional exceptions to standard pacing; may not need to show work, do all math problems	Planned variation in process/sense making
Etc.	Occasional adjustment in grading to reflect student effort and/or ability	Planned variation in product/output
	Etc.	Consistent use of flexible groups
		Individual goal setting, assessment (grading)
		Grading to reflect individual growth/progress
		Adopting a mentor role
		Etc.
	More Reactive More Dependent on Student Response	More Proactive More Dependent on Teacher Coaching
	More Fixed More Closed	More Fluid More Open

what they have to do is a tough way to go, but then I have to ask myself whether we would have seen movement toward differentiated classrooms if we had waited until our staffs were ready to move on it." A teacher echoed the voice of many colleagues in stating, "When these things get mandated, it's a problem." Bandura (1986) posits that a sense of self-efficacy leads to motivation and positive behavior. When self-efficacy is lacking, the result is predictable. "If I'm not in the driver's seat, I'll only cooperate so far," said one Midland teacher. Another suggested, "They should do staff development for several years before something this big so there isn't culture shock." Given the reality of the top-down mandate, Midland administrators provided many opportunities for teachers to explore the initiative, question it, and share feelings. That proved somewhat helpful, but, as one teacher explained: "I feel better after I vent, but it shouldn't have had to happen that way. It's backwards." The Midland experience indicates that initiatives which require major teacher change are likely to evoke less dissension if they arise from teacher reflection over time rather than from administrators or boards. As Fullan (1993) observed, it is difficult to mandate what matters. It may be that action from above is a useful catalyst, but judicious leaders need also to consider that unless the mandate can be transformed into motivation, positive and long-term change is unlikely.

• **Fear of fadism**—A consistent theme among Midland teachers and administrators was a sense that schools had become a "Fad of the Month" club. Thus teachers reluctant to accept changes required in a differentiated classroom found justification for their hesitancy. "It's just this year's thing," explained one teacher, "and by next year, it'll be something else." Another suggested, "I think we're only doing this because somebody thinks we have to show people we're up on the latest thing and changing all the time." An administrator reflected, "The hardest thing for us here is maintaining a focus on something important for long enough to make change possible." As an antidote to the prevailing skepticism, educational leaders have developed and shared long term timelines for growth toward differentiated heterogeneous classrooms. Teacher doubt remains. "Every year we see last year's fix fade away." The Midland experience indicates a need for pervasive focus on differentiation over a period of several years if it is to become a reality and, in fact, if teachers are even to believe that it will.

• **Need for flexible blocks of time**—At roughly the same time the differentiation initiative was inaugurated, so was a seven-period day at Midland Middle School. In theory, the opportunity for flexible time blocks in the middle school existed. In reality, schedule rigidity was the order of the day. "My differentiation in science gets smashed with short periods and a lack of flexible scheduling. We say we have block scheduling, but there's a sense that if you run overtime, the next teacher is going to be plenty mad. If it happened to me too often, I'd be mad too. I can't get the students started on one thing before

it's time to clean up. How could I get several activities started in such a short time?" Classroom observations made evident the sense of fragmentation resulting from short class periods, even in a single-approach classroom. A classroom in which tasks and time must be adapted for student needs benefits greatly from block time and flexible time use.

Issues Related to Changing Expectations

In order to develop a classroom which acknowledges and appropriately addresses broad academic diversity among students, older and more traditional pictures of schooling must give way to images built on a contemporary understanding of how students learn. Developing classrooms which were student-centered and in which students worked in a variety of ways to make sense of and apply key concepts called for major changes. Older approaches were comfortable; the newer ones, threatening. "I've been teaching for a long time in a good district where my kids get good scores. There's nothing wrong with that." "We're not malicious, but we sort of only know how to do school the way we used to when moving everybody past the same basic skills seemed to work." Figure 2 delineates skills undergirding instructionally differentiated classrooms which were troublesome for Midland teachers.

Leaders who work to facilitate differentiated instruction can take a lesson from Midland that developing academically responsive classrooms calls for a wide array of teaching skills not common in the practice of many teachers. It is important to diagnose and respond directly to needs of individual teachers as they develop core skills of instructional differentiation.

• **Multiple avenues to learning versus a single way**—Assessing student readiness and matching learning opportunity to student need, teaching with varied resources rather than a single text, encouraging expression of learning in varied ways rather than through a single test or project are key to classrooms which accommodate academic diversity. They were also unfamiliar to many teachers at Midland. An administrator reflected: "We've been shooting with water guns—a small stream of water down the middle of the class. We've got to figure out how to be oscillating sprinklers—and where to put the soak hoses from time to time." A teacher explained: "I think we really aren't sure how to see if a student has mastery enough to move to something new. Until we know how to assess, we can't really see that one student is ready to move on and another has missed the point. We don't know how to start it all. We don't know how to keep it going."

• **Management versus control**—For many Midland teachers, the great gremlin of a differentiated classroom was fear of losing control. Most of the teachers were skilled at controlling a single-focus classroom. They were less confident of their skill at coordinating multiple activities and at helping students develop self-management. "It's nuts to think these kids are old enough to discipline themselves to stay on task. Every time I give them group work to do, they start talking about all kinds of unrelated stuff. And that's when they are all doing the same thing," said

Figure 2
Skills of Differentiation with Which Midland Teachers Experienced Difficulty

Skill of Differentiation	Explanation	Support Needed
1. Developing a Rationale for Differentiation	Teachers felt they already differentiated instruction, they were trapped by standardized test assessments, and it would take too much time to make robust adjustments.	Opportunity to talk about student diversity; discuss with students and parents "goodness of fit" of classrooms for academically diverse students; chances to diagnose student readiness and learning to determine "what's working."
2. Preparing Students and Parents for a Differentiated Classroom.	Teachers feared students and parents would think they were being unfair if tasks varied for different students. Also feared parent and student response to grades based on individual growth.	Guidance in preparing students and parents for differentiated classroom; skills in alternative assessment; permission to work with varied grading formats which may combine information from: individual, class, school, national measures.
3. Managing a Differentiated Classroom	Teachers felt unprepared to work with multiple activities in the classroom.	Information, models, and coaching on establishing expectations for student behavior in a flexible classroom; using flexible groups, assigning students to flexible groups, giving directions for multiple assignments, monitoring group functioning, monitoring individual progress, record keeping.
4. Defining Key Concepts and Generalizations to be Taught	Teachers were accustomed to teaching the text or curriculum guide in a linear way. Everything in the book/guide seemed important. Coverage for all students was highly valued. Teachers were not familiar with identifying pivotal concepts and generalizations which are focal for differentiated instruction.	Rationale for teaching by concept, opportunity to work with subject area experts to identify key concepts and generalizations in units of study, skill development, coaching in teaching by key generalizations.
5. Differentiating What is to be Taught	Teachers used a single-resource approach to provide information.	Availability of multiple resources for teaching key ideas (texts, trade books, computer programs, real-world investigations, etc.) and support understanding how to use them. Skill in conducting class discussions and sharing sessions when students have used varied resources.
6. Differentiating How Students Think About What is Taught	In most instances, teachers used a single activity for practice regardless of level of student understanding of topic. Activities tended to be drill and practice or summary level—or "fun" without focus on essential understandings.	Information on and coaching in teaching using varied instructional strategies to prompt thinking; developing a range of activities to assist students in sense making with essential ideas, extending activities for advanced learners.
7. Differentiating How Students Show What They Know	Most teachers used a single product/project assignment for all students. Product assignments seldom required students to revisit and expand on essential understandings about a topic.	Information and coaching on developing multiple product assignments on a single theme, varying product parameters and criteria for student interest/readiness, giving students a voice in product development, developing products which focus on real-world issues.
8. Understanding/Developing Models for Planning Differentiated Lessons	Most teachers lacked a framework for thinking about differentiated instruction as it might be translated into their classrooms.	Opportunity to work with a variety of teacher-developed heuristics for planning differentiated lessons and view sample differentiated lessons constructed from varied models which support appropriate differentiation.
9. Establishing Interdisciplinary Differentiated Lesson/Units	Interdisciplinary instruction was a Midland goal. It promotes connectedness of knowledge for students and lends itself well to differentiation. Midland teachers were unsure how to select appropriate concepts, coordinate planning among teachers, and develop interdisciplinary lessons. Standardized tests were a discourager.	Information and guidance in selecting appropriate concepts to support interdisciplinary instruction; assistance in team planning, execution and assessment of interdisciplinary units; curriculum guides with differentiated units; curriculum guides with interdisciplinary focus/options.
10. Expanding Instructional Strategies for Differentiating Content-Process-Product	Teachers generally lacked knowledge of or comfort with a range of instructional strategies which facilitate management of differentiated classrooms.	Information and coaching with varied instructional strategies which support differentiation (e.g. compacting, independent study, contracts, creative problem-solving, graphic organizers, etc.).

one teacher. A teammate added: "It [having a classroom in which multiple activities take place] reminds me of my first year of teaching. I don't think I can handle that sense of impotence again." For many Midland teachers, managing multiple groups which were doing the *same* activity was often a skill which had to be mastered before a teacher could take the next step and adjust the activities for varied student needs.

• **Student-centeredness vs. teacher-centeredness—**

Early observations at Midland revealed a preponderance of classrooms in which teachers were more active than students and in which relatively passive completion of whole-group tasks prevailed. One teacher explained: "I think my lectures are about right. I'm working a bell-shaped curve with the students. I challenge everybody." Another said: "Right now I set the pace. That works. This new idea is that students might work at their own pace. It's not possible in the classroom." A key element of teacher-centeredness was moving systematically through texts to get ready for standardized tests. Midland teachers believed it was their job to ensure that students made it through prescribed curricula in time to fare well on end-of-year state and local assessments. "What if the scores fall?" worried a teacher. "Then it will be my fault because I didn't cover everything with everybody. It'll be my hide they're after." This fear was exacerbated when concept-based teaching was commended as key in differentiation. Extending activities for advanced students and ensuring meaningful and focused learning for students who have great difficulty in grasping material depend on teaching by concept rather than covering a mass of material which may be long since mastered by an advanced student and overwhelming to a struggling student. For Midland teachers, it was unfamiliar and frustrating to identify key concepts in texts and other classroom materials. "What differentiation says to us is that we have to know what the essential concepts are in our units and how to build learning on those concepts in a lot of ways. I don't think I can do that. At least not yet." Teaching by concepts was also threatening in light of the looming standardized tests. "It [teaching by concepts] scares me because of the end-of-year tests. We probably wouldn't cover everything, and what will happen to the [standardized test] scores?"

Midland teachers who were asked to develop student-centered, concept-based classrooms but who remained aware that their own success and that of their students would be assessed according to fact-based standardized tests felt they were being asked to do the impossible. They were probably correct. Educational leaders would do well to deal with that conflicting message before teachers must do so.

Issues Related to Professional Support

Some antidotes to fears surrounding the changing expectations for Midland teachers lay in support which they felt would help them risk new behaviors in the classroom.

• **Need for an umbrella—**In any scenario Midland teachers could imagine, the effort required to develop a differenti-

ated classroom seemed massive. They referred often to feeling fragmented. "We're going in too many directions. We have to have a focus." "I'm working so hard," said a teacher. "I don't know how I can add anything else." "This is one more thing for me to do, and I am already overwhelmed." A framework or umbrella to help teachers see the connectedness of varied district or school initiatives would be helpful to Midland staff in exactly the same way that a good interdisciplinary unit draws together concepts and insights for students. For example, the umbrella of "developing student-centered classrooms" could draw on such initiatives as writing workshops, teacher advisory, differentiation, cooperative learning, interdisciplinary curricula, multiculturalism, and many other practices which were being commended to the Midland staff but which they saw as separate mandates. Lacking such a framework for comprehensive change, Midland teachers felt pulled apart, splintered. "I'm stretched to the bone already." "It's like we've got all the mosaic pieces, but we can't see the picture they're supposed to make." A framework which serves as a gyroscope in an unsteady atmosphere of change can galvanize vision, energy, and effort.

• **Need for models—**In the beginning, Midland teachers wanted a recipe for differentiation. "Just tell us what to do and we'll do it. Isn't it on paper somewhere?" In time, many teachers began to understand that there were many ways to modify instruction based on student need and interest, the nature of the subject, range of available instructional strategies, and so forth. Several teams also began to devote regular team meetings to discussing differentiation. A member of one team said: "I think we spent the first part of the year as a team pulling one another down about differentiation. Then it occurred to us that among us we must surely have some skills at work already. We discovered we do, of course, and we've become a resource for one another." At that point, teachers willing to move ahead with differentiation spoke clearly of a need for concrete assistance in enacting differentiation. "We need somebody to sit down with us regularly and show us ways to do this with our own subjects." "We need somebody who can work with us in our classrooms on differentiation. It's like in college where they tell you all this stuff about teaching while you sit and listen, and it makes no sense at all until you start using it." Videotapes of classes in which differentiation was evident, examples of differentiated lesson and unit plans, opportunities to talk with teachers who utilized elements of differentiation, and accessible on-site leadership were important at Midland. "It was amazing. She [an instructional leader] sat down with our team and in less than an hour we had really made progress on a differentiated product for our kids. We were really excited." "When I saw the tape, it came together for me. I guess I'm a visual learner, but for the first time I see how I could have different groups and individuals working in different ways on the same concept."

• **Teachers as learners and administrators differentiating learning—**Treating teachers as though they are all

alike is an ineffective way of commending the importance of individual readiness and skill. In fact, middle school teachers at Midland were as diverse in readiness to make great leaps in learning as were the students they taught. Some had backgrounds as high school teachers where subject expertise was a source of comfort but flexibility in teaching style was rare. Others came from an elementary teaching background in which flexibility was more common but content confidence was sometimes lacking. Many had minimal training in teaching advanced learners or struggling learners—few had expertise with either. Some teachers, of course, remained intractably opposed to the changes suggested.

In such a setting, the opportunity is ripe for administrators to model principles of differentiated learning with their staff members. As in a differentiated classroom there could be goals common to the group and goals negotiated between the individual “learner” (in this case, the teacher) and the “teacher” (in this case, an instructional leader). There could be timelines for progress established in accordance with learner readiness which has been preassessed with classroom observation, learner reflection, and dialogue between teacher and learner. Varied learning resources could be provided in response to learner interest, style, and request. Throughout the year, the learner and teacher could come together in small and large groups to share work and insights, learning from one another and then focusing again on individual goals. It is likely that the concept of differentiation would become clearer and more compelling to a faculty which saw the diversity of its own members accepted and built upon. “We each have talents,” said a Midland teacher. “We need to get credit for doing what we do well. We need that acknowledgment, and we could move on from there.”

A Sketch of Early Success

“In this kind of class, weaker students excel—which is exciting—and strong students are challenged.”

Just as there are advanced learners in many middle school classrooms, there were also advanced learners in regard to differentiation of instruction among the Midland staff. These “early subscribers,” as one administrator called them, provided a profile of a teacher who learns to modify instruction in a heterogeneous setting and a profile of early attempts to develop personal heuristics for differentiation. Both are instructive for planning staff development leading toward classrooms which are appropriately differentiated for academic diversity.

Profile of Teachers Who Differentiated Instruction

During the first year of the Midland differentiation initiative, many teachers made only modest progress in developing classrooms which addressed academic diversity. Some made little, if any, observable progress. There was, however, a group of teachers who made major changes in their classroom management and instruction and who were advanced, at least in comparison with other colleagues, in their implementation of differentiated instruction in their classrooms.

Data for this portion of the study were derived from observations and interviews with a group of approximately 15 teachers designated by self and/or Midland administrators as ready for “advanced” work with differentiation during the second year of the project. Although a preponderance of the group came from Midland Middle School, some taught at other district middle schools. Their views thus represent those of “subscribers” rather than resisters. A look at teachers who did evidence progress in establishing differentiated classrooms is useful in assisting other teachers who demonstrate readiness to attempt differentiated instruction.

Both teachers and administrators in Midland speculated that age and length of professional experience might predict early success—the general theory being that younger teachers would be more likely to change. “Maybe some of us are too old,” mused one veteran of many years. “When you’ve done something a certain way for 25 years, it’s hard to change.” “We’ve told them [more experienced teachers] for years that they are superstars,” said an administrator, “and now we’re taking that status away from them. Maybe it’s not fair. Maybe we’ve taught them not to change.” A young teacher drew a similar conclusion from a different vantage point. “It’s hard for veteran teachers to change, but I’m new and everything is new to me, and I *have* to change in order to grow.”

As the year progressed, however, it became apparent that the “new subscribers” were not defined by age. Some of the most experienced and most inexperienced Midland teachers were in the “advanced group.” Early indications are that at least two traits were shared by those teachers who showed the greatest inclination and ability to move toward differentiated classrooms: (a) they were inquirers about students, and (b) they saw schooling as an organic enterprise in which disequilibrium or “disturbance” was a catalyst for growth. Regarding students, one teacher who made rapid and observable differences in her practice during the first year of differentiation in Midland explained: “I’ve moved around a lot, taught in the inner city and in honors classes. I’ve learned to study kids and to meet them where they are.” Another said, “My goal for my students is for them to see where they have strengths and weaknesses and then to help them set their own goals based on what they realize are their strengths and weaknesses.” Regarding the role of risk in teaching, an “advanced” teacher reflected: “If I hit a brick wall with the kids today, well that’s okay with me. I’ll know to avoid it tomorrow—and I’ll learn a lot about those bricks in the process. I’ll learn about myself as a teacher, too. And if I’m lucky, the students will see that learning is often about *finding* answers, not *having* them.” Another said: “Maybe more talking up front would have been good for us, but maybe not. Maybe folks have to get their feet wet in order to understand what it’s [differentiation] all about. I subscribe to that ready-fire-aim principle, you know. I try it, and then I can figure out what’s working and what’s wrong.” In fact, change among the faculty at large during the first year of differentiated instruction at Midland supports the idea that people are more likely to act their way

into belief than to believe their way into acting. This suggests that experiencing success with a given classroom practice is more likely to bring about change in teacher behavior related to that practice than is trying to convince the teacher that the practice will be useful (Guskey, 1986).

Profiles of Early Teacher-Developed Heuristics

A major issue for Midland teachers in the early months of the differentiation initiative centered around how a differentiated classroom "would look," in other words, "I just don't see how you'd set it up so different students had different tasks at different times. Wouldn't it just be nuts?"

The "early subscribers" converted principles of differentiation to their own teaching styles, learner needs, and subject matter. As they discussed with one another how they implemented differentiation, their initial "models" or heuristics were implicit in their conversations. Figure 3 provides samples of ways in which three Midland teachers routinized the concept of differentiation. It is interesting and important to note that while the models have in common an intent to identify essential understandings, learner readiness, and strategies for matching content, process, and product to the learner, teachers applied these common principles to their classrooms in a variety of ways. This ability to understand and adapt elements

of effective instruction is an important step away from formulaic teaching and toward a level of professionalism in which educators adapt their knowledge to the needs of their clients (Darling-Hammond & Goodwin, 1993).

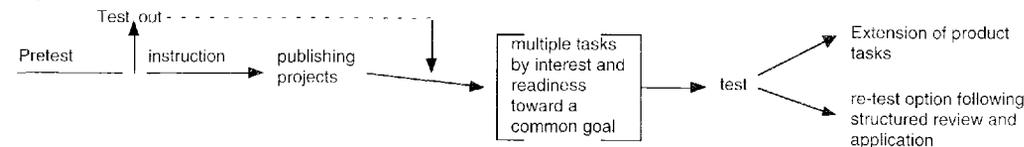
Summary

Qualitative research does not claim broad generalizability. Nonetheless, the Midland differentiation experience leads to some interesting and potentially useful insights which merit further study in other settings.

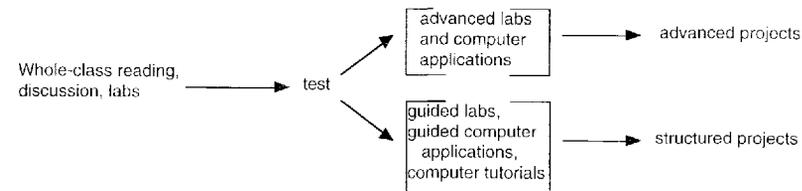
1. Academically diverse youngsters (e.g., advanced and struggling learners) report that they often do not find appropriate levels of challenge in one-size-fits-all classes.
2. Teachers in heterogeneous settings do not automatically know how to address academic diversity in those settings and often see no need to change teacher behaviors in order to do so.
3. Without clear definitions of what constitutes appropriately differentiated classes, teachers may believe that making occasional minor modifications in lessons is adequate to address academic diversity.
4. In order to assist teachers in establishing differentiated classrooms, educational leaders should be aware of spe-

Figure 3
Samples of Ways in Which Midland Teachers "Advanced in Differentiation"
Routinized Management of a Differentiated Classroom

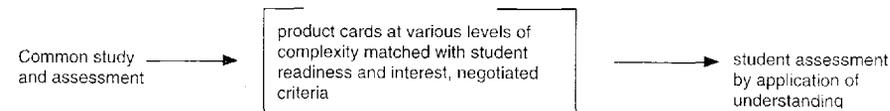
English Teacher's Management Model



Science Teacher's Management Model



Social Studies Teacher's Management Model



cific impediments to differentiation as perceived by teachers, including administrative barriers and barriers presented by a paradigm shift which necessitates new ways of thinking about and practicing in classrooms.

5. Administrators should present specific classroom initiatives as interrelated means to accomplishing central instructional goals so that teachers do not feel pulled in many directions.
6. Teachers need models of how differentiation "looks" in classrooms, consistent on-site assistance in translating principles of differentiation into their own classrooms over an extended period of time.
7. Administrators should consider modeling differentiation for teachers as they move toward differentiated instruction, using the same rationale, format, and procedures that would benefit academically diverse learners in a classroom.
8. Teachers advanced in readiness to differentiate instruction in heterogeneous classrooms can provide momentum and models for a school or district moving toward differentiated instruction.

There is a need to move beyond an exploratory study of teachers as they begin to differentiate instruction for academic diversity and to investigate in depth the change sequences through which both subscribers and resisters proceed, management routines developed by teachers as they learn to differentiate instruction, teacher developed heuristics and models for differentiating instruction, and characteristics of administrators who are effective change agents toward differentiation. In addition, it is essential to examine relative long-term learner outcomes for academically diverse learners, including the gifted, in differentiated and nondifferentiated regular classrooms, as well as in specialized class settings.

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NAGC Awards

The following individuals were recognized by the National Association for Gifted Children at the 37th Annual Convention.

Micheal Saylor and William K. Brookshire
 Gifted Child Quarterly Paper of the Year

Donna Y. Ford
 Early Scholar Award

Patricia O'Connell Ross
 Presidential Award