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What Every Teacher Education Professor Needs to Know About Differentiated Instruction



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ABSTRACT

Even though differentiated instruction is considered best practice for addressing student diversity, preservice teachers may not be receiving the training they need to plan differentiated lessons and utilize a wide variety of teaching strategies. Teacher education programs are not effective in inculcating the principles of differentiated instruction because preservice teachers do not observe, experience or implement differentiated instruction in the preservice courses or their practicum experiences. MSU-Billings faculty are addressing differentiated instruction in their own teaching to test the premise that modeling differentiation may be a more effective way of assisting preservice teachers to understand and implement differentiation in their own teaching.

When preparing future teachers for success in public school classrooms, a major obligation is to address how the teacher responds to the wide variations in students' abilities, interests, and backgrounds. Conscientious classroom teachers have long recognized it is not possible or legitimate to look at a group of public school students and pretend they are essentially alike. Even though the students may be relatively the same age and in the same grade level, public school classrooms are diverse (Siegel & Shaughnessy, 1994; Capper, Frattura, & Keyes, 2000; Lieberman, A. & Miller, L. 2000). The dilemma for teachers is how to address this diversity while constrained by the limitations of time and resources. A classroom teacher is only one person. How can he or she meet the wide range of learning needs presented by contemporary students?

In teacher education, the old method for addressing diversity was to have the teacher candidates develop a lesson plan and then show how they would ratchet up the expectations for the brighter students and lower the expectations for the slower or less capable students. Essentially these lesson plans were a one-size-fits-all template with slight modifications for those students who did not fit in. Children, however, are canny; they realize when a lesson includes busy work or is "dumbed down." Teaching everyone from the same lesson plan can create a pecking order of scholastic winners and losers, belying the fact that all children have the potential to learn and be genuinely successful (Hoer, 2000, p. x).

So what is a teacher educator to do? How do we prepare future teachers for the daunting task of teaching on multiple levels while still assuring that children meet uniform educational

standards? Tony Manson (1999) conducted a study to determine the extent to which teacher education programs in California and Kansas prepared teachers to work with diverse groups of students. His study reported that many teachers admitted that there was “room for improvement” in their preparation to teach an increasingly diverse student population (p. 9). According to Manson, teachers expressed the belief that there is a mismatch between what is needed to teach students of different racial and ethnic groups and what they actually learn in teacher preparation programs.

Tomlinson (1999) found similar results in her research on teacher-education programs, discovering that teacher-education programs are not preparing future teachers for the increasing diversity of students across abilities, backgrounds, and experiences. For example, she found that preservice teachers seldom, if ever, have themselves experienced differentiated instruction in their preservice courses so new teachers do not know what it would be like to be a student in such an environment. Most teachers have had only one survey course on students with learning problems or disabilities and the emphasis in that course was on describing the learners rather than how to teach students who learn differently. Without any explicit instruction in effective teaching strategies for children, new teachers apparently do not know where to begin.

Even more telling is Tomlinson’s finding that teachers reported education professors, university supervisors, and mentor teachers rarely encouraged them to differentiate instruction during their student teaching experiences. In fact, according to Tomlinson, during preservice training, mentor teachers often discouraged preservice teachers from differentiation, recommending instead that the students be “kept together” on the same topic and assignment.

So without specific training, personal experiences, or observations of how to differentiate instruction for diverse learners, it is not surprising that new teachers adopt the methodologies they have experienced and know. Tomlinson says,

Once in their own classrooms, the under-
 tow for new teachers to “teach to the middle”

is profound, both because of the complexity of teaching and because of peer pressure to conform to “the way we do school here.” The few novice teachers who had master teachers who differentiated instruction were far more likely to do this in their first teaching placement than their classmates (p. 115).

Clearly, preservice teachers have to see and experience differentiated instruction before they will have the skills and the confidence to implement different teaching strategies to meet the needs of a variety of students (Collier & Meyers, 2002).

At Montana State University-Billings (MSU-B), the teacher education program in conjunction with the Montana Office of Public Instruction and a State Improvement Grant (SIG) has offered a course in differentiated instruction for two years. This course is taught jointly by a faculty member from special education and one from general education. The special education faculty member has been the same one each semester, but the general education faculty members have been different each time, including a professor who teaches curriculum courses, a science educator and a math professor. The next team member is scheduled to be a professor of reading instruction. Each of the members of the teaching team models for the preservice teachers a wide variety of ways that content, process, and products can be differentiated according to student readiness, interests, and learning profiles.

An offshoot of the team teaching has resulted in the team members themselves implementing differentiated instruction techniques in their other courses. For example, for one of her course units, the math professor assessed her students in terms of interests, learning profiles, and readiness. Based on the assessment results, she divided her geometry class into three groups and had the math preservice teachers study the Pythagorean Theorem from three different perspectives, ranging from more concrete to abstract applications.

The special educator in this project routinely uses interest inventories and other informal assessments to group and re-group her college students according to interest, readiness and learning profile. Even though college students are

less diverse in readiness than students in public school, she has found there are still important differences in background that flexible grouping can address.

In the collaboration course that all preservice students majoring in elementary and special education must take, the instructor models tiered lesson plans and requires preservice students to develop their own lesson plans based on using a variety of learning activities, teaching strategies and requirements.

By team teaching a course in differentiated instruction and implementing differentiated instruction in their own college teaching, the MSU-Billings teacher education faculty has endeavored to offer teacher candidates a clearer picture of what differentiated instruction looks like and what is involved in its implementation. Perhaps more importantly, the faculty members themselves report they are developing a solid sense of what constitutes powerful curriculum and engaging instruction across the spectrum of college students. They attempt to demonstrate in their own teaching what it takes to modify instruction so that each learner comes away with understandings and skills that prepare him or her for the next phase of learning.

The dialogue that occurs between the special and general educators as they teach differentiated instruction enriches their professional development and disseminates at a deeper level the basic principles that Tomlinson and others recommend for differentiating instruction. By focusing on differentiating their own instruction, faculty members are demonstrating to their preservice students the efficacy of the following principles:

- Keeping the focus on understanding and applying concepts and not on retention and regurgitation of facts.
- Using continuous assessments of readiness and interests.
- Making grouping flexible.
- Acting as a facilitator and guide instead of a director of instruction.

The work of integrating differentiated instruction into preservice training has just begun at MSU-Billings, but the first big step has been taken. Faculty members have admitted that their

own teaching styles and strategies need to change so that preservice teachers can see and experience differentiated instruction in action. Not all faculty members are onboard yet, but signs of interest are growing. The next steps in the process of “modeling what we preach” may include specific requirements for differentiated lesson planning during practicum experiences prior to student teaching, implementation of differentiated instruction during student teaching, and additional evidence in student portfolios of the acquisition of the knowledge, skills and dispositions necessary to differentiate instruction successfully.

For faculty members, changing teaching behavior is challenging but also energizing since the planning of differentiated instruction requires analysis and self-reflection that renews and invigorates the work of even the most experienced teacher. As the faculty’s program of differentiated instruction becomes more fully embedded in coursework, faculty members will have the opportunity to observe and do research on whether there is an increase in the differentiated instruction skills of teacher candidates who receive training in university classrooms where differentiation strategies are explained and modeled. The faculty’s hypothesis is that the process of addressing student diversity begins with the instructors and mentors of the next generation of teachers. The long range goal is to graduate teachers who are comfortable and expert in implementing a growing range of instructional strategies that address different needs and honor students’ backgrounds and strengths.

REFERENCES

- Capper, C.A., Frattura, E., & Keyes, MS. (2000). *Meeting the needs of students of all abilities: How leaders go beyond inclusion*. Thousand Oaks, CA: Corwin Press, Inc.
- Collier, S. & Meyers, B. (2002). Developing preservice teacher-researchers to meet the needs of individual children. In J.R. Dangel & E.M. Guyton (Eds.). *Research on preparing teachers who can meet the needs of all students*. (pp. 45-66). Dubuque, IA: Kendall/Hunt Publishing

Company.

Hoerr, T.R. (2000). *Becoming a multiple intelligences school*. Alexandria, VA: Association for Supervision and Curriculum Development.

Lieberman, A. & Miller, L. (2000). Teaching and teacher development: A new synthesis for a new century. In R.S. Brandt (Ed.). *Education in a New Era* (pp. 47-66). Alexandria, VA: Association for Supervision and Curriculum.

Manson, T.J. (1999). Cross-ethnic, cross-racial dynamics of instruction: Implications for teacher education. (Report No UDO32861). Clarksville, TN: Austin Peay State University. (ERIC Document Reproduction Service No. ED 429 141)

Siegel, J., & Shaughnessy, M.F. (1994). Educating for understanding: An interview with Howard Gardner. *Phi Delta Kappan* 75(7), 563-566.

Tomlinson, C. (1999). *The Differentiated Classroom: Responding to the Needs of All Learners*, Alexandria, VA: Association for Supervision and Curriculum Development.

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