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Collaborative Partnerships to Achieve Equity

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Introduction

The collaborative partnership between most campus laboratory schools and their university or college department of education differs from campus to campus. The dual purpose of this partnership is to provide an education to school aged children as well as to provide college education majors an opportunity to observe and teach in a laboratory environment. The focus on inclusion and providing a free and appropriate education in the least restrictive environment for students with disabilities is an additional benefit for *all* of the students. In order for the partnership to be most effective, conversations must occur between general and special education faculty members in both schools as well as between the college and campus school faculties.

One such conversation began between a mathematics educator and a special educator at the university and later included a teacher at the laboratory school regarding the topic of equity. This mathematics educator recently attended the National Council of Teachers of Mathematics (NCTM) Leadership Academy in which the Academy's theme was equity. The President of the Council, in addressing projects and initiatives involving equity during the Academy, was asked by the mathematics educator, if students with special needs should be included in the planning of projects and initiatives to provide equity in schools. He acknowledged the omission of this group. The indication given was that mathematics educators and special educators were not engaged in communications about equity. The president challenged the author to begin a discussion with special education faculty members about the topic of equity and students with special needs.

As the educators sat down to begin this conversation, they discovered there were a lot of missing pieces that needed to be in place before they could start talking about how best to ensure that students with special needs had equity in mathematics. This gap seemed to be in

terminology and the lack of involvement from the laboratory school; therefore a classroom teacher at the laboratory school joined the conversation. These individuals all talked about similar terms, but seemed to be using them in different ways. They began to wonder if this was occurring among others such as the campus school classroom teachers and their lab school special education partners. Two questions came to mind: first, are mathematics educators and special educators talking; and two, are they talking about the same thing? Specifically, are they communicating the same message?

The purpose of this article is to present talking points that educators of mathematics and classroom teachers can use to begin or clarify communication with special educators either within their campus schools or their affiliated colleges of education. Classroom teachers will have a deeper understanding of the vocabulary needed to communicate more effectively with their special education partners within their schools and with their affiliated university department.

Finding Common Talking Points

In order to establish what the special educator and lab school classroom teacher understood, they were asked a series of questions to determine how one's field defined the terms being used. The following are the questions and responses from the special educator and lab school classroom teacher, and a reflection upon the responses from the mathematics educator.

Question One: What do you think is meant by the term equity?

Responses by the Special Educator to Question One

"When I think about equity in special education, the first word that comes to mind is inclusion. Remember that inclusion is different than mainstreaming. In mainstreaming, students are placed in the general education classroom with or without an adequately trained teacher. True inclusion is that the IEP (Individualized Education Plan) team has determined that the general education classroom is the least restrictive environment for that student for that particular subject area (e.g., mathematics). The IEP team has also developed the accommodations the student needs in order to have an equal chance of succeeding in that classroom as a student without a disability. It is this equal chance that I feel is equitable."

Responses by the Lab School Classroom Teacher to Question One

“Equity to me means that all children in my classroom are entitled to an equal opportunity for an education according to their needs. Students should receive equal opportunities to study as well as equal support.”

Reflection by the Mathematics Educator on the Responses to Question One

In the Sixty-sixth NCTM Yearbook entitled *Perspectives on the Teaching of Mathematics* (2004), Carol Malloy indicates that equity is about access. She indicates that when speaking about equity in mathematics teaching and learning, equity is referred to as math for *all* and opportunities for *every* child. Thinking about the response from the special educator, the question arose whether the math education community spoke of equity as mainstreaming or inclusion. When teachers indicate equity is about access or opportunities, the profession falls short of inclusion. Whether a definition of equity as access or opportunities would mean equal chance of succeeding is questionable. This is not to say that defining equity as access does not imply an increased opportunity for success, but implicit statements can be enacted in different ways. The *Equity Principle* for school mathematics outlines a vision that *all* students can learn mathematics (NCTM, 2000). According to the document, equity does not necessarily mean equal. This statement is interpreted that instruction and assessment do not have to be the same for *all* students. At times it appears that the mathematical educational community has taken the word “equal” completely out of the conversation. Thus when special education and laboratory school colleagues use the phrase “equal chance,” a very different connotation of the same phrase is inserted. This phrase is an excellent example of a special education teacher and a classroom teacher using the same vocabulary but not communicating with each other.

Question Two: How do you define differentiated instruction? What about differentiated assessment?

Responses by the Special Educator to Question Two

“Differentiated instruction is just good teaching. Teachers need to get to know their students’ strengths and weaknesses. You may have a very strong student with very weak interpersonal skills who may not do well in cooperative learning but left to his own devices will do very well. A teacher who uses differentiated instruction is one who plans lessons based on the combined needs of the class. Generally a differentiated lesson plan would have three types of objectives:

1) what will all students know and be able to do at the conclusion of the lesson; 2) what will most students know and be able to do at the conclusion of the lesson; and 3) what will some students know and be able to do. You can think of this as a pyramid with the all being at the base of the pyramid and the some at the very top. Take addition for example. You may have an objective that all students will be able to add single digit numbers using the numbers 0 - 4 with a sum no greater than 9, most students will be able to add single digit numbers using the numbers 0 - 7 with a sum no greater than 14, and some students will be able to add single digit numbers 0 - 9 with a sum no greater than 18.”

Regarding differentiated assessment, if a teacher sets mastery at 80% (regardless of the assignment requirements), a teacher may feel successful if the all students achieve this benchmark. The same teacher may expect the most students to demonstrate mastery at 90% while the teacher's expectations for the some students to be 95+%. In this scenario, the teacher has not differentiated objectives (see above paragraph). If the teacher does differentiate the objectives then setting mastery at 80% or whatever is chosen would be the same for the all, most, and some students.”

Response by the Lab School Classroom Teacher to Question Two

“In the laboratory school, differentiated instruction applies an approach to teaching and learning so that students have multiple options for taking in information and making sense of ideas. Teachers need to be flexible in their approach to teaching and adjusting the curriculum and presentation of information to learners rather than expecting students to modify themselves for the curriculum. Differentiated assessment would also be based on what the student is learning. Students need to have the opportunity to demonstrate what they have learned using various forms of assessment.”

Reflection by the Mathematics Educator on the Responses to Question Two

One of the most difficult concepts to understand while working in the Elementary and Special Education Department is the idea of differentiated assessment. Differentiated instruction from the response from the classroom teacher seems to be similar to my understanding of the term; however, differences occur in the idea of differentiated objectives and differentiated assessment. The main problem in this area is lack of communication between those in special

education and those in regular education. It has been difficult to internalize the concept of differentiated instruction due to a lack of special education training and certain embedded beliefs about math, grading, and assessment. The discussion among colleagues is critical to developing a deeper understanding of the benefits of differentiated instruction and to expand thinking and teaching beyond an individual's undergraduate preparation. The reader is encouraged to reflect upon his or her own understanding of these terms and how they are enacted in classrooms. Moreover, you are encouraged to open the conversation with your colleagues (at universities and lab schools) to help you work through misconceptions and beliefs that may hinder equity for students with special needs in your classroom or school. Question Three: What are some terms in Special Education that the classroom teacher should know in order to be an effective teacher for students with special needs?

Response by the Special Educator to Question Three

“Right off the top of my head, a teacher should know the difference between an accommodation and a modification. According to Taylor et al. (2008), they state accommodations are, "A change in the input or output method used by the teacher or the student related to the intended instructional outcome without changing the content or conceptual level" (p. 127), and a modification is a change to a rule, the content or a standard which the student is allowed based on their disability. These changes (e.g., exclusion from district wide testing) are a modification for a student with significant disabilities but maybe not a modification student with a lesser disability such as a learning disability. These are the two most important terms teachers should be familiar with. Concepts that teachers should be aware of include Free Appropriate Public Education (FAPE), Least Restrictive Environment (LRE), and Individualized Education Plans (IEPs). FAPE is a component of the law mandating special education services for students with disabilities at no cost to their parents. LRE is a component of the law that allows multidisciplinary teams to determine where a student with a disability can best receive his or her education to the greatest extent appropriate with students without disabilities. IEPs are legal documents specifying the goals and objectives a student with a disability is working toward during the year and it also specifies those accommodations and modifications ato which a student is entitled.”

Response by the Lab School Classroom Teacher to Question Three

“The terminology used in special education varies from system to system, state to state. Teachers need to look at their system and become familiar with the terms used in the IEP and certification paperwork.

Reflection by the Mathematics Educator on the Responses to Question Three

As I thought about the responses to question three, I must admit that I had the terms accommodation and modification being used interchangeably. As an advocate of equity for students with special needs, I would talk to my pre-service teachers about accommodation when I meant modification. Once again, the identical terminology is sending different messages, and this difference in the messages interferes with all students being offered an equal opportunity to learn mathematics. Is it really important that the correct term be used when speaking with colleagues and with future teachers? The answer is yes for two reasons. First, using the term incorrectly will result in special educators appropriately believing that the math education community is not aware of the correct meaning of special education terms, and this will create additional barriers in communication. On the other hand, classroom teachers often complain about the lack of knowledge about math on the part of special education teachers. These feelings lead to barriers that not only hurt communication but also the students (i.e., PK – 16). The second reason the misuse of these terms is problematic is that using modification in lieu of accommodation can result in lower standards and expectations. NCTM comments that students with disabilities are more likely to experience low expectations (2000). When the mathematics education community uses the term “accommodation” incorrectly, it lowers the academic expectations for students with disabilities.

Conclusion

NCTM envisions mathematics instruction as meeting the needs of all students. Thus, NCTM set forth the goal *Mathematics for All*. An important goal for teachers to realize is that instruction must be differentiated in order to meet the needs of *all* students. In order to adequately differentiate instruction, the math community must open communication with special educators. Classroom teachers must collaborate with special educators to effectively teach math to students with special needs. It has been demonstrated that different groups of

educators use the same terms, but with different meanings. The mathematics community, classroom teachers, and special educators must communicate effectively, and to do this all groups must define terms in the same way. Finally, mathematics educators and classroom teachers need to understand and appropriately use key terms from the special education field. To achieve NCTM's goal of *Mathematics for All*, every stakeholder needs to be present and participate in the discussion about equity. An open communication must be established so that students with special needs will have equity in mathematics both at the university and lab school sites.

References

- National Council of Teachers of Mathematics. (2000). *Principles and Standards for School Mathematics*, Reston, VA.
- Rubenstein, R. N., (Ed.), & Bright, G. W., (Ed.). (2004). *Perspectives on the teaching of mathematics (sixty-sixth yearbook)*. National Council of Teachers of Mathematics. Reston, VA
- Taylor, R. L., Smiley, L. R., & Richards, S. B. (2008). *Exceptional students: Preparing teachers for the 21st century*. Boston: McGraw Hill.