

New Jersey seeks to INCLUDE all students through universal design principles By Laurence Cocco, with Linda Carmona-Bell and Joseph Seaman



Laurence Cocco

There is a growing national conversation about promoting differentiated instruction for students as a way of increasing academic achievement. For instance, the recently released report *Class of 2020: Action Plan for Education*, from the State Educational Technology Directors Association, contains a Student Bill of Rights that says: Each student deserves an individualized learning experience addressing his or her abilities, strengths, and weaknesses.

Recognizing the need for individualized learning and its relationship to student success, New Jersey is proposing a new state requirement that all students including general education students have Personalized Student Learning Plans (PSLPs) in grades 6-12. These PSLPs would involve students in setting their own learning goals based on their personal, academic, and career interests, with the close support of adult mentors, teachers, counselors, and parents.

The Implementing New Curricular Learning with Universally Designed Experiences (INCLUDE) initiative, a state grant program recently launched by the New Jersey Department of Education (NJDOE), embraces the concept of individualization in two critical core curriculum areas: mathematics and educational technology.

INCLUDE, which was first implemented in December 2007 as a Title II, Part D (Enhancing Education Through Technology) discretionary grant program administered by NJDOE, is designed to increase math achievement for eighth-grade students who have not attained the desired level of math proficiency targeted by the state. A key goal of the program is to help general-education math teachers in meeting the needs of all students including students with disabilities, those who are struggling, and English-language learners regardless of their individual learning style.

The grant was created from an intra-office partnership, with active collaboration and planning beginning in 2005 among the offices of Educational Technology, Special Education Programs, Title I, Bilingual/ESL Education, and Abbott Implementation. The Office of Educational Technology and the Office of Special Education Programs combined federal dollars to provide the funding. Thirteen school districts were awarded funding in December 2007 for the first year of this four-year grant. Grantees were allowed to apply for a maximum of \$162,000 in year one and \$226,000 in year two. The maximum funding amount for year three is estimated at \$263,000 and for the last year, \$280,000.

INCLUDE is designed to ensure that all students are given the necessary accommodations that will support their achievement of the New Jersey Core Curriculum Content Standards in mathematics. The grant provides training and resources to help educators improve their students' academic achievement by adopting and implementing the principles of Universal Design for Learning (UDL). UDL is a framework for overcoming limitations and barriers in classrooms that prevent children from learning. UDL was developed by the Center for Applied Special Technology (CAST), whose mission is to expand educational opportunities for individuals with disabilities through the development of innovative uses of technology. (Additional information about CAST and UDL may be found on the CAST web site, www.cast.org.) Once grounded in the curriculum, UDL provides flexibility and options to the teachers and students.

Perth Amboy's INCLUDE project director, Catherine McNulty, met with a few fifth-grade INCLUDE students

to get their perspectives on learning through the UDL approach. They seem to innately understand what differentiated learning and UDL looks like, she noted. The conversation left me speechless.

Access to these comments is available through a podcast at <http://tinyurl.com/9bztpk>. One student said, 'We should take ... a vote and see how different people in the class work together. And if they like working hands-on together, then you should put a hands-on group that learns by hands-on, a book group that learns from the book, and another way, with a SMART Board. And then ... one day the hands-on group will use the SMART Board, and then one day the book group will use the SMART Board. ... It just keeps going around, so everybody gets to use the SMART Board.'

The basis for a successful inclusive classroom, where all students are learning to the best of their abilities, is collaboration among experts in the areas that affect each student. Therefore, grantees were required to form Inclusive Practice Teams consisting of the principal and other administrators, including math content specialists, the district's professional development coordinator, and at least one representative from each of the following areas: Educational Technology, Assistive Technology, Mathematics Curriculum Development,

Modifying for the needs of [students with disabilities and English-language learners], and providing them with the tools necessary for individual success, has benefited all students including those who otherwise might not have been identified. The atmosphere of our classrooms is such that students are excited to learn and feel safe to make mistakes, leading them to greater success and accomplishment. If they believe, they can achieve and succeed! Recent comments expressed by our students include, 'This is the best thing I've ever done,' 'Can I stay in here all day?' and 'I wish math was two periods!'

Susan Marie Beal, the INCLUDE project director in Lindenwold, reports: 'When asked about the INCLUDE grant, Denise, a fifth-grade student, summed it up by saying, 'The technology has helped me to have fun in math, because I have so many different ways of understanding the problem ... thank you!' She's having fun in math, while understanding the problem that's not something you often hear in a traditional classroom, and it indicates a successful implementation of UDL principles.'

Desired outcomes for the grant program include:


- Specialized training for teachers in differentiation and effective use of educational technology to support the different learning styles, languages, and disabilities of all general-education math students by using the UDL approach. After this training, teachers will understand that differentiated instruction is one component of the UDL approach, and they'll understand how to use this approach effectively in every aspect of their teaching.

- Providing the research-based pedagogy for teachers to teach mathematics to middle school students, with in-house coaching to support the UDL framework.
- Equity of access for all students, and the opportunity to participate to the fullest extent in the instructional math program with the appropriate supports.
- Demonstration of increased student proficiency on New Jersey's standardized achievement test in mathematics, as well as in technological literacy and other 21st-century skills.

Palisades Park Superintendent Mark Hayes stated that the INCLUDE grant ... has also allowed teachers to go way beyond the 'how to' of integrating technology and [UDL] strategies, [and] into application and full implementation. This is so important because for years, teachers felt as if they were practicing drills for the big game, but never getting off the bench.

Project Director Jane Martin added, 'When the program began, all identified teachers reported feeling uncomfortable with the idea of including students with special needs in their general-education math classes. They believed they were not equipped to handle the needs of students with disabilities, [because] they were not trained special-education teachers. They felt overwhelmed by the grant requirements and thought that it would be impossible to meet the goals and objectives. Now, all report feeling completely prepared to include students with special needs in the general-education math classroom. Their teaching skills have improved, and assessments document that their technology skills have increased significantly. There has been a paradigm shift as 100 percent of involved teachers acknowledge that all students, whether classified or not, can and will benefit from new alternative methods of presentation and assessment.'

NJDOE is hopeful that comprehensive district planning, combined with the outstanding implementation of INCLUDE by grantees, will result in higher academic achievement for all students and produce a model that can be replicated broadly to effect systemic change.

Responding to the individual needs of all students in the least restrictive environment that leads to successful learning experiences and student achievement is a key priority for education reform in New Jersey. This is the future of education. This is the promise of INCLUDE. 



Students in Hamilton Township, N.J., use technology to learn.

Bilingual/ESL Education, Special Education, Title I, information/network technologist, and parents.

The grant design also required current grade-level math teachers and the teachers in the next consecutive grade level to plan together for implementing the grant, along with the grant project director, other teachers of classrooms involved in the grant project, and any other person interested in participating.

The first year was dedicated to training, planning, and preparing for the full implementation of INCLUDE in September 2008. By the end of the fourth year, it's expected that teams will have successfully modeled how systemic change in educational practice can be accomplished in a school district by establishing an inclusive, success-oriented environment. Grantees are required to establish a minimum of eight general-education mathematics classrooms, while building a high degree of content competence in implementing a standards-based mathematics program.

Given that the grant program is only in its first year of implementation (and the second year of the program overall), it is too early to report specific achievement data. But qualitative data obtained from students and educators indicate that the UDL approach has been well received and shows excellent potential.

Hamilton teachers Joanne O'Malley and Henry Zawodniak, as well as math and technology coach Elena Manning, had this to say:

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