

Guiding Principles: Curriculum for Twice-Exceptional Learners

By M. Elizabeth Nielsen & L. Dennis Higgins

*They said she would never read or write
And her struggles would keep me up at night
And I'm afraid that maybe they are right
But she's so bright.....*

(from the song They Said She Would Never Read or Write, Higgins/Nielsen, 1989)

Found within classrooms across the country are children who are very bright but who struggle with reading, writing, and/or social difficulties. These children are a puzzle to their teachers who struggle with how to best meet their needs. These children are referred to as “twice-exceptional” children. These children have two exceptionalities, one being giftedness. In the Southwestern part of the United States, one school district has successfully met the needs of this population situation since 1988. Beginning with the support of a federally funded project, this district has continued to meet the needs of hundreds of twice-exceptional children long after the federal project ended.

Introduction

In 1988, Dr. Elizabeth Nielsen, in collaboration with the Albuquerque Public School District and the University of New Mexico received the first of two Jacob-Javits Educational Grants. The Jacob-Javits federally-funded grants required recipients to address underrepresented populations of gifted and talented children. Dr. Nielsen’s initial Javits grant focused on the identification and service of gifted children who also had a disability/challenge area. In addition, this grant concentrated on developing classroom interventions for elementary and middle school children dually diagnosed as gifted with one or more disabilities. The grant was titled “The Twice-Exceptional Child Project.” Soon after, the term “twice-exceptional” became a household word, eventually finding its way into the current revision of the Individuals with Disabilities Educational Act (IDEA).

The second Javits grant, “Project Reach,” expanded the work of the first to include high school level students. Additionally, Project Reach provided training and outreach programs to educators, universities, and school districts across the nation. The following narrative is a brief

summary of what was developed during the historic six-year period of the Jacob Javits funded activities mentioned above. These grant-related outcomes have continued to evolve and be refined through research and school-based implementation programs. It is a “sketch,” of what has been learned through this direct experience with twice-exceptional children at all grade levels.

The task of understanding the nature and needs of this very special population began immediately with the funding of the first grant. Based upon research findings, a number of curricular modifications were developed. Curricular modifications, or “Guiding Principles,” were developed and put into place in the classes that were established for the population of twice-exceptional students within a large school district located within the Southwestern part of the United States.

These ten Guiding Principles are presented below. An overview of each component is provided. Each explanation also describes how these components were used within the involved public and private schools and what was learned about students from their interactions and responses to these components. These components have become known as the “Guiding Principles of Curriculum Development for Twice-Exceptional Children” (Nielsen/Higgins, 2011).

Guiding Principles

In developing curriculum for twice-exceptional learners, the curriculum must offer:

Time With Twice-Exceptional Peers

Rationale: It is widely known that twice-exceptional students struggle with isolation (Trail, 2011). As a result, twice-exceptional students must experience space and time with other students who share the same characteristics. It is within this setting that twice-exceptional students discover they are not “the only one” with unique challenges or exceptional gifts. Once a student becomes acquainted with others who share the same life experiences, they are able to see that the challenges they have are not as disabling as first thought and possibly learn how to use their gifts to overcome these challenges. They soon discover it is OK to be a twice-exceptional

learner and discover ways to help them understand who they are as people and techniques that will allow them succeed.

What we did: We provided unique settings that allowed twice-exceptional students to be together during a portion of each school day. In some cases, we provided “self-contained” classrooms for students with a teacher who was specifically trained to understand the needs and nature of the population. Some of the daily experiences were in a structured academic setting and other experiences were in a semi-structured social setting.

What we learned: Twice-exceptional students were able to relax and “be who they are” when surrounded by other students who have had similar experiences and can talk about the challenges of being twice-exceptional students. They found life-long friends and frequently developed long-lasting loyalties to one another.

Appropriate Emotional, Social, And Cognitive Activities

Rationale: The emotions of twice-exceptional students can be their dominating characteristic. Their emotional disposition influences their social behavior and in turn has a direct impact on their cognitive functioning. These children often have feelings of anger, of worthlessness, and of failure (Reis, M.S., & Colbert, R., 2004). Teachers must provide an environment that will focus on the emotional well-being of these children.

What we did: We provided learning activities that encouraged students to explore and express their feelings about being twice-exceptional individuals. We taught a series of lessons we termed “Social Grammar” and encouraged students to explore their feelings and behaviors on a metacognitive level. Science lessons became an analogy for emotional responses to cases of bullying, negative interactions, and awkward interactions. In one case, a science lesson about stimulus/response found in lower animals served as a discussion about students’ personal actions and reactions (personal stimulus/response) to a variety of social situations.

What we learned: Once students were able to analyze behaviors on a scientific level, they were able to examine these behaviors on a meta-cognitive and personal levels. As a result, they were

able to make appropriate social adjustments to their responses to specific situations. They were able to use scientific language taken from the science lessons and apply this language to an immediate and personal situation. This positively changed the way these students approached and solved problems.

Advanced Organizers

Rationale: Twice-exceptional students love puzzles but not surprises. They have an expressed need to know what is planned on a daily basis. Providing an advanced organizer before a lesson is presented is one way to help students reduce the stress of the school day or even a school year (Mulueg and Cohen, date unknown). Organizers also allow students to show relationships across themes and ideas (Coleman, 2005). Once they have knowledge of pre-arranged school experiences on either a short-term or long-term basis, there is an increased acceptance level of what is planned. This “organized thinking” strategy is a positive intervention that helps students succeed within the school setting.

What we did: We routinely provided an advanced organizer for each school day and for each school year. We also developed a three-year advanced organizer for the curriculum in several of the schools involved with the project. The plans were presented in a graphic format that allowed students to examine the plans in a clear and concise manner.

What we learned: Students were better able to accept planned lessons and assignments once they gained a view of the immediate or long-term future. They were also able to provide input into their own learning. This made a positive difference in their attitudes toward school. They often expressed a sense of relief in knowing what was expected of them.

Qualitatively-Differentiated And Interdisciplinary Curricula

Rationale: As is true with the general population of gifted students, twice-exceptional learners require a rigorous curriculum. Modifications in content, process, product and environment are required when designing curricula for the twice-exceptional population (Higgins, 2012). Twice-exceptional children often come into the classroom with a wealth of information. However, the information they bring to the classroom is often scattered and unorganized at best. Shaping the curricula around conceptual themes fortifies the ability for students to use the information

through their strength areas. Appropriate evaluation of their limited products is critical to their academic success as is the physical and psychological atmosphere of the environment in which these students work.

What we did: We developed a physical environment that was safe and inviting. It was an area where children could work at their own pace and develop products that were appropriate for their learning styles and challenges. The environment was complex and included “hard and soft” areas with a variety of technologies designed to help students by-pass their individual challenge areas. The curriculum was enriching, advanced, interdisciplinary, and challenging while at the same time accommodating to individual challenges.

What we learned: Students rose to the challenge when presented with abstract concepts and generalizations, higher-level thinking, and higher-level feeling activities. They were capable of developing unique products once appropriate modifications were put into place. They thrived when other twice-exceptional students were in the classroom and often encouraged each other to improve academic performance. The learning environment had a positive influence on individual success.

Strategies Of Inquiry And Discovery

Rationale: Twice-exceptional students often reject the rigid, “do-it-my-way” approach some teachers instill in the classroom. Instead, these students want to organize content in their own unique way and from their own perspective. Inductive thinking allows these students to organize their thoughts through their own classification system. However, it takes a teacher who is well trained and experienced in the inductive thinking teaching method. Once used with these students, their thinking and confidence increases and they begin to think for themselves.

What we did: We designed lessons and educational experiences based upon the Hilda Taba strategies of Concept Development and Interpretation of Data. We also used a powerful curriculum developed by Jerome Bruner. In addition, we incorporated a number of commercially developed, technology-based programs to the school day. We carefully connected all curriculum

to state standards.

What we learned: Twice-exceptional students thrived on the opportunity to make real contributions to lessons that allowed them to share responses without fear that they would be unfairly judged or evaluated. They thrived on the opportunity to build upon their ideas over time and were eager to organize concepts from their unique perspectives.

Individualized Instruction In Core Subjects

Rationale: Depending on the exceptionality, twice-exceptional children exhibit a wide range of academic needs. Their Individual Education Plans (IEP) usually define what a teacher must address in terms of instruction. This typically means very diverse lesson plans for each child.

What we did: We provided a “folder-work system” for each child. Every Thursday morning, all academic assignments for the “work-week” were “published” in each student’s individual folder. Every child received academic assignments that matched their IEP driven requirements. All work became due the following Wednesday. With teacher supervision, students worked on their academic assignments individually and on their own time, completing work by the due date without the time pressures found in a traditional classroom.

What we learned: Gradually, students became more autonomous as they responded to assignments. Since they were able to “time manage” their work, they became less stressed about new assigned work. By re-structuring the beginning of the “work-week” to Thursday mornings, we changed the way students felt about and approached the school week. Parents consistently commented that this made home life so much easier and less stressful—especially weekends.

Research Opportunities

Rationale: Like all gifted children, twice-exceptional children need opportunities to research their passions. Given their characteristics of below average reading level, unorganized thinking, and limited ability to focus over time, this is often very difficult for them (Nielsen, 2005). They tend to struggle with the endurance needed to pull together long-term research projects and

reports.

What we did: We continuously provided opportunities for research projects. We incorporated short- and long-term research assignments and encouraged the use of traditional and Internet sources. Students were encouraged to develop the skills needed to find appropriate facts that would allow them to complete a research project.

What we learned: This proved to be a very difficult requirement for students. Although they require the “big picture” in order to reduce levels of stress, they also have difficulty seeing what that “big picture” required while conducting research. In addition, because many of these students lacked the reading and required writing skills, they were unable to adequately find supporting facts for their study. They also lacked the motivation in many cases to complete the requirements for a research study. This is one modification that requires more study.

Autonomous Learning

Rationale: Betts and Knapp (1981) developed the Autonomous Learner Model (ALM) for students who were “disenchanted.” Quite possibly, many of these “disenchanted” students were twice-exceptional students before any widespread programming was developed to meet the needs of these students. The Autonomous Learner Model provides a mechanism to help these children who have a “fierce independence” and encourages them to accept the responsibility to develop their own direction in education.

What we did: Following the goals of the Autonomous Learner Model, we implemented a variety of activities that encouraged students to become independent and responsible for their own learning. Since the model is considered to be a three-year model, it fit well with those students who were in a self-contained program and on the three-year curriculum cycle. Our Folderwork system allowed for individualization of academic work and placed the due-dates in the hands of the students. Since New Mexico is rich in history we incorporated the “Adventure Trips” from Dimension One of the ALM model and provided a three-day, two-night camping

trip to the ancient Anasazi site of Chaco Canyon, NM to study components of New Mexico history. In addition, the Autonomous Learner Model (ALM) license was implemented and became a strong motivator for students who wanted to achieve this high level of individual autonomy. ALM License is laminated card, much like a driver's license, students earn by demonstrating responsibility in education. Once earned, the student carries the card and is allowed freedoms within the school setting. These freedoms included the ability to manage their own classroom modifications, design their own assignments, and have unlimited access to school facilities that are tied to assignments. Much like a drivers license, if these freedoms are abused the Autonomous Learner License can be suspended or revoked.

What we learned: Twice-exceptional students responded well to the freedoms provided by the Autonomous Learner Model not only because of the independence it promotes but also because of the social, emotional, and cognitive components contained and experienced within the curriculum.

Opportunities In Futures Studies

Rationale: Twice-Exceptional students often feel as though they don't have a future. By incorporating "Educational Futures Studies" into the curricula, students received the message that they do have a certain amount of control on their personal future (Twice-Exceptional Dilemma, 2006). By incorporating futures studies and thinking into the classroom, students could analyze and accept rapid change encouraged by technological advancements and social trends.

What we did: Most enrichment activities had an Educational Futures Studies component tied to their objectives. We included the Future ME[®], the Future Explorer, and the Seven Wonders of the Future World programs into the enrichment activities. We constantly asked students to "think like a futurist would think" by using trend analysis and trend extrapolation.

What we learned: Students were able to image and create positive futures if given the appropriate time and appropriate environmental setting. They began to feel better about themselves once they recognized that they do have a certain amount of control on their own futures. They were able to make better decisions and make clear choices for themselves.

Ancillary Services And Support

Rationale: Often, twice-exceptional students have several exceptionalities. This generally requires that the sponsoring teacher include other professionals involved within the student's educational process. The coordination of educational experiences requires all parties involved to work together as a team in the best interest of the child.

What we did: We held numerous meetings with principals, teachers, parents, and other faculty. We directly involved the skills of other professionals from a variety of disciplines. These additional professionals provided services connected to the curriculum for these students, often working within the classroom setting.

What we learned: By including a team of professionals in the education of twice-exceptional children, we were better able to meet the needs of twice-exceptional children. We also expanded the understanding of the emotional, social and cognitive needs of twice-exceptional children throughout the field.

Implications

Providing an appropriate educational program for twice-exceptional special-needs children requires the use of unique modification and the work of many professionals within the field of education. No one can do this alone. It is essential to provide programs that follow what the students need. That "need" is often elusive and unattainable at first glance. But, once the "need" is determined, educators immediately face a new set of challenges. The "Guiding Principles for Curriculum Development for Twice-Exceptional Children" is a starting point for program development – designed to allow school districts the flexibility of interpretation. What worked in our schools in the Southwestern part of the United States may not work as well in other settings.

It is important that each school district explore the local resources and existing mission statement to see how best to serve the twice-exceptional student. That will help create a “real future” for these wonderful students.

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