**Essential Questions?**

*How do we educate the child born in 2000 to live, work and compete in the “flat world” described by Thomas Friedman?*

*How will this generation of children grow up with the necessary knowledge and wisdom, as defined by the new 21st century taxonomies, to address issues, problems and challenges when solutions are complex and not easily definable and accessible?*

*More importantly, how will children have meta-cognitive prowess to explore deeper questions to ponder and seek solutions to problems not yet known?*

*Leonardo, The Dreamer*

*A Debate by Leonardo and Michelangelo*

**Transforming Education for the 21st Century Learner**

*Project Bright IDEA 2 was designed as an integrated approach to transforming the classroom for kindergarteners, first and second graders into a vibrant community of learners and problem solvers. This unique K-2 research model, funded by the Javits Program of the United States Department of Education, was designed and implemented by the North Carolina Department of Public Instruction and the American Association for Gifted Children at Duke University in response to a legislative mandate to increase the number of gifted children from underserved populations into gifted and academically challenging programs. Based on the success of *Project Bright IDEA 1*, a pilot intervention program for closing the achievement gap, *Project Bright IDEA 2* was awarded the grant to "upscale" the program to more schools and to research the impact on gifted programs from underserved populations.*

**Bright IDEA Goals**

*Project Bright IDEA 2 had four goals: 1) to scale-up the activities of *Bright IDEA 1* toward increasing the number of gifted students from underserved populations via changing the dispositions and capacity of teachers to wisely use curricula tailored to teaching those students; 2) to study the extent to which such activities increase the number of third grade students from underrepresented populations who enroll in gifted programs; 3) to advance the quality of these students’ meta-cognitive and cognitive skills; and 4) to create a research-based multi-dimensional, pre-identification model for gifted intelligent behaviors (GIB’s) based on the Costa and Kallick’s *Habits of Mind* and on Frasier’s *Traits, Attributes and Behaviors.*

*Bright IDEA 2 began in kindergarten and tailored gifted methodologies for regular classroom teachers to use with all children. *Bright IDEA 2* was built on the most advanced research and best practices and focused on empowering regular classroom teachers, principals and curriculum specialists, through training and mentoring, to become curriculum architects for the future. Participants were trained to design interdisciplinary, concept-based curriculum units consistent with state standards, infused with *Building Thinking Skills* and *Gifted Intelligent Behaviors*, and to change their dispositions and classroom environments to meet the learning styles and needs of all students.*

*Bright IDEA 2 students were challenged to use the full range of their talents and intellectual abilities as they address authentic and complex academic tasks. The program built upon and extended the *North Carolina Standard Course of Study* through rigorous concept-based integrated learning tasks and a research-based thinking skills program. *Bright IDEA 2* teachers and principals created scholarly environments that engaged students actively and consistently in sophisticated investigations of materials, texts, and in learning tasks that required them to understand and apply critical and creative processes that were quite advanced for K-2 students. Students were engaged in centers designed around multiple intelligences with task rotations integrated with four major learning styles.*
**PROJECT BRIGHT IDEA 2: Interest Development Early Abilities**  
A Javits K-2 Nurturing Program funded by the United States Department of Education  
2004-2009

**Bright IDEA Research**  
Brunswick County  
Belville, Lincoln & Supply  
Duplin County  
BF Grady & North Duplin  
Elizabeth City-Pasquotank  
JC Sawyer & Northside  
Guilford County  
Allen Jay, Murphey Traditional & Northwood  
Hickory City  
Viewmont & Jenkins  
Lenoir County  
Contentnea, Pink Hill & Northwest  
Moore County  
Aberdeen & Vass-Lakeview  
Roanoke Rapids Graded District  
Belmont & Wm. Manning  
Robeson County  
Peterson & Rosenwald  
Rowan-Salisbury Schools  
China Grove & Hurley  
Wake County  
Aversboro & Lynn Road  
Harris Creek & Wakelon  
Principal Investigator:  
Mrs. Mary Watson,  
Retired Director (March 1, 2013)  
Exceptional Children Division, NCDPI

**Co-Designer:**  
Mrs. Mary “Valorie” P. Hargett,  
Retired, EC Division & Curriculum, Instruction & Technology Division, NCDPI

**Evaluator:** Ron Tzur, Ph.D.  
University of Denver  
**Research Assistant:**  
Rachael Kenney, Ph.D.  
Purdue University

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**Professional Development Model**  
The professional development (PD) Model was designed to change dispositions about how to teach diverse populations within a rigorous curriculum environment and to have high expectations for the potential of each and every child. The Model built upon and extended the work of Dr. Mary Frasier who was pivotal in infusing the cultural perspective in the *Bright IDEA 1* pilot program. Frasier’s *Talents, Attributes and Behaviors* (*TAB’s*) and the *Habits of Mind* (*HOM*) developed by Dr. Art Costa and Dr. Bena Kallick were adapted into *Gifted Intelligent Behaviors* that were observed and documented on each child in *Bright IDEA 2* classes. The first phase of teacher training focused on integrating the state standards, Parks and Black’s *Thinking Skills*, Bloom’s revised taxonomy, Marzano’s new taxonomy, mathematics for young children, and Stage 1 of *Understanding by Design* into their teaching practices. Participants were prepared to write a concept-based interdisciplinary unit based on a *Bright IDEA* designed template.

A *Buddy System Observational Tool*, (Hargett) was created, to assist the teachers as they observe each other’s classrooms. This tool helped in observing how a *Bright IDEA* classroom deviates from typical classrooms and promotes teachers’ continual improvement of the learning environment as they become more adept at teaching their units and managing their classrooms.

Now funded for the entire five years, data has been collected on approximately 4200 *Bright IDEA 2* students and 4200 standard program students and 400 participants, including 168 *Bright IDEA 2* classroom teachers. An additional 168 standard program teachers had data collected on their classes. Data has been collected from *North Carolina K-2 Assessments* and a math problem-based questionnaire. A pre and post curriculum unit was taught that integrates all of the best practices into one unit for deep understanding of the concepts. Out of these assessments, gifted intelligent behaviors were observed in students and reported as progress toward independent learning and potential for gifted programs.

The professional development model included training by national, state and local trainers providing all participants with research-based instructional practices. An *Educator Disposition Survey* was administered to all participants at the beginning and end of training to determine the impact of training on principals’ and teachers’ dispositions and their practices. As a result of the training and the practice in the classroom, the project has produced approximately 125 concept-based integrated curriculum units. The multicultural, concept-based interdisciplinary units provide rigor and differentiated instruction for the high population of diverse students.

*Project Bright IDEA 2* was designed to fulfill the recommendations set forth in the *Darity Report* that was submitted to the State Board of Education on the status of underserved populations and the need to close the achievement gap and to increase the number of gifted children from these populations. Results indicate that the Project has more than met the stated goals of the research.
Project Bright Idea 2: Interest Development Early Abilities
A Javits K-2 Nurturing Program funded by the United States Department of Education
2004-2009

Impact of Project to Date:
Five-Year Research Project
Eleven School Districts
28 Cohort Schools
168 Bright IDEA Classes
168 Standard Classes
1 Demonstration Site

Curriculum Design Training for:
180 Classroom Teachers
15 AIG Teachers
30 School Principals
11 AIG Coordinators
15 Curriculum Specialists
8 Mentors – Pilot Site
Dissemination Sites

Research-Based Training
Adapted for Bright IDEA:
Thinking Skills (Parks & Black)
New Taxonomy (Marzano)
Bloom’s Revised Taxonomy
Habits of Mind (Costa & Kallick)
Talents, Attributes, and Behaviors (Frasier)
Learning Styles (Silver & Strong)
Multiple Intelligences (Gardner)
Mathematics for Young Children (Olive & Sheffield)
Understanding by Design (McTighe & Wiggins)
Interest Development (Alexander & Gayle)
Performance Task Rotations & Instructional Strategies (Moirao)
Differentiated Instruction (Smutny)
Concept-Based Curriculum Model (Hargett and Gayle)
Multicultural Methods & Materials
North Carolina Standard Course of Study

All three cohorts have been supported by numerous on-site follow-up curriculum design training events conducted by the project team, AIG coordinators, lead AIG teachers and lead mentors from the participants in Bright IDEA.

Research Findings
Increasing Talent Pool for Underrepresented Populations

Before project Bright IDEA 2 began its work in 2004 in the 6 counties of Cohort-1, essentially no students from their schools were nominated to Gifted and Talented programs from underrepresented populations. Due to the mere requirement of participating schools to recommend students, 72 (10%) third graders who graduated from non-Bright IDEA classes were nominated. With this positive change in mind, the impact of Bright IDEA on its 2nd grade graduates was astonishing - 88 (24%)! third graders who were taught by Bright IDEA second grade teachers were nominated for Gifted and Talented programs. That is, one in every four students from Bright IDEA classes developed the multi-intelligence powers needed for being nominated. A chi-square analysis of proportions reveals that this is an extremely significant difference (p < .0001).

Gifted Intelligent Behaviors (GIB’s)

Bright IDEA teaches Gifted Intelligent Behaviors, adapted from Costa and Kallick’s, Habits of Mind and Frasier’s, Talents, Attributes and Behaviors through concept-based curriculum units designed by the teachers and principals in the project. Rubrics were used to develop a profile of the students that led to the increase in the head count for the talent pool of Bright IDEA students.

Changing Teacher Dispositions

The goals of the project were accomplished in terms of teachers’ adoption of key pedagogical principals and major change was evident in: dispositions toward race/ethnicity, toward parents’ role and the teacher’s need to proactively partner with the parents, and toward understanding how to teach math to young children.

Evaluator’s Kudos (Ron Tzur, Ph.D.)

After five years, project Bright IDEA-2 demonstrated two essential attributes: (a) capacity to initiate and sustain, in a sizeable number of teachers, a desired transformation in the notoriously resistant-to-change modes of teaching and (b) capacity of the team to self-improve via intensive reflection on unexpected problems and via immediate and efficient responses to ongoing feedback (formative evaluation). These two produced a remarkable increase in the number of underserved students who become eligible for Gifted and Talented programs. Combined, these findings suggest that Bright IDEA is evolving into a national model program for transforming teaching and learning at K-2 levels.

This model program consists of the project goals (found to be comprehensive, focused, unique, and scalable), professional development activities (found to be highly effective and teacher-empowering), and degree to which the project goals are accomplished (i.e., found to increase the number of underserved students nominated for G/T programs and to promote desired changes in teacher dispositions/practices). Teachers have become excited about innovating around their own creative use of the model.
References

Increasing Opportunity to Learn via Access to Rigorous Courses and Programs: One Strategy for Closing the Achievement Gap for At-Risk and Ethnic Minority Students. A report prepared for the North Carolina Department of Public Instruction by:

William Darity, Jr.
University of North Carolina at Chapel Hill

Domini Castellino
Duke University

Karolyn Tyson
University of North Carolina at Chapel Hill


In response to State Law 2000-67, Section 8.28(b), which directed the State Board to study the under-representation of minority and at-risk students in Honors classes, Advanced Placement and academically gifted programs. For the full report: www.ncpublicschools.org

State Laws
115C-150S - Article 9B was passed in 1996 to broaden the definition of academically gifted and to give school districts flexibility in determining how AIG students are identified. For more information on NC Gifted Laws: www.ncagt.org

Bright IDEA has been adapted in a strategic plan for The Exceptional Children Division, NCDPI, to meet the needs of Coordinated Early Intervening Services (CEIS) and to align with RTI strategies for special needs students.

Article 9B – North Carolina Law
The section of Chapter 115C of the North Carolina General Statutes addressing academically or intellectually gifted students is Article 9B, a section added in August 1996. It replaced previous sections of Article 9 that pertained to academically gifted students and removed gifted education from the law governing children with special needs. It begins with a statement of purpose and definition of gifted students. §115C-150.5, "The General Assembly believes the public schools should challenge all students to aim for academic excellence and that academically or intellectually gifted students perform or show the potential to perform at substantially high levels of accomplishment when compared with others of their age, experience, or environment. Academically or intellectually gifted students exhibit high performance capability in intellectual areas, specific academic fields, or in both intellectual areas and specific academic fields. Academically or intellectually gifted students require differentiated educational services beyond those ordinarily provided by the regular educational program. Outstanding abilities are present in students from all cultural groups, across all economic strata, and in all areas of human endeavor."

Nurturing the Potential and Developing Talent in K-2 was a strategy designed by the North Carolina Department of Public Instruction to implement one of the recommendations of the Darity Report and as a response to State mandates.

Bright IDEA Local Education Agencies (LEA’s) Student Population 2008-2009 Membership:
*Brunswick County – 11,452 Students
Duplin County– 8,756 Students
*Elizabeth City/Pasquotank County – 5,995 Students
*Guilford County– 70,332 Students
*Hickory City – 4,474 Students
*Lenoir County – 9,425 Students
*Moore County – 12,231 Students
*Roanoke Rapids Graded School District – 2,281 Students
Robeson County– 23,204 Students
*Rowan-Salisbury – 20,428 Students
*Thomasville City-Demonstration Site – 2,551
Wake County – 132,518 Students
*School Districts have expanded components of the Model across their districts based on available funding. Building Thinking Skills, Habits of Mind and Learning Styles Training are the components most used. Many are training on Marzano and Bloom’s Revised Taxonomy also.

Mary Watson, Director, Exceptional Children Division, NCDPI and Dr. William Darity, Professor, Duke University and Board Member of AAGC discuss: Project Bright IDEA and the rationale for the research on NC Now, UNCTV. Check it out: http://is.gd/a2vu3