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 has 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 (GI B’s) based on the Costa and Kallick’s Habits of Mind and on Frasier’s Traits, Attributes and Behaviors.

Bright IDEA 2 begins in kindergarten and tailors gifted methodologies for regular classroom teachers to use with all children. Bright IDEA 2 is built on the most advanced research and best practices and focuses on empowering regular classroom teachers, principals and curriculum specialists, through training and mentoring, to become curriculum architects for the future. They are 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 classroom environments to meet the learning styles of all children.

Bright IDEA 2 students are challenged to use the full range of their talents and intellectual abilities as they address authentic and complex academic tasks. The program builds upon and extends the North Carolina Standard Course of Study through rigorous concept-based integrated activities and a research-based thinking skills program. Bright IDEA 2 teachers and principals create scholarly environments that engage students actively and consistently in sophisticated investigations of materials, texts, and in learning activities that require them to understand and apply critical and creative processes that are quite advanced for K-2 students. Students are engaged in centers that provide task rotations through four major learning styles and multiple intelligences.
**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 Sites**

**Brunswick County**  
Belville, Lincoln & Supply

**Duplin County**  
BF Grady & North Duplin

**Elizabeth City-Pasquotank**  
JC Sawyer & Northside

**Guilford County**  
Allen Jay & Sedgefield  
Murphey Traditional Academy & 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

**Co-Principal Investigators:**
North Carolina Department of Public Instruction  
Mrs. Mary Watson, Director  
Exceptional Children Division  
Mrs. Valorie Hargett, Section Chief, ELA  
Secondary Education Division

**Evaluator:** Ron Tzur, Ph.D.  
Purdue University

**Research Assistant:**  
Rachael Kenney, NCSU

**For More Information:**
Mrs. Margaret Gayle, Project Director and Executive Director  
The American Association for Gifted Children, Duke University  
919-783-6152  
megayle@aol.com

The professional development component builds upon and extends 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 have been adapted into Gifted Intelligent Behaviors that can be observed and documented on each child in Bright IDEA 2 classes. The first phase of teacher training focuses 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 practice. Participants are prepared to write a concept-based interdisciplinary unit based on a Bright IDEA designed template.

A Buddy System Observational Tool was created as an adaptation of the Japanese Lesson Plan Study approach, to assist the teachers as they observe each other’s classrooms. This tool helps demonstrating 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.

If funded for the entire five years, data will be 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 will have data collected on their classes. Data will be collected from North Carolina K-2 Assessments and a math problem-based questionnaire. A pre and post curriculum unit will be taught that will integrate all of the best practices into one unit for deep understanding of the concepts. Out of these assessments, gifted intelligent behaviors will be observed in students and reported as progress toward independent learning and potential for gifted programs.

Across the projected three cohorts, a staff development model that includes national, state and local trainers will be administered that will provide data on 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 will produce approximately 125 concept-based integrated curriculum units. These units will be taught and revised and provide for rigor and differentiated instruction for the high population of diverse students.

Project Bright IDEA 2 is striving 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.

The National Conference on Gifted Education (NAGC) was held in Charlotte, North Carolina on November 2-5, 2006. Bright IDEA was highlighted in a number of presentations and an Action Lab showcased Bright IDEA classrooms in Thomasville, North Carolina. For results of Project Bright IDEA 1, the pilot program, updates on Bright IDEA II and NAGC presentations please check out [www.aagc.org](http://www.aagc.org).
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

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 (Moirao)
Differentiated Instruction
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. 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 is 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 teachers taught 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 participants 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. The data collected during the 2005-2006 year of implementation from Cohort-1 is available on the web site: [www.aagc.org](http://www.aagc.org).

Changing Teacher Dispositions
The goals of the project were accomplished in terms of teachers’ adoption of key pedagogical principals but more work is required in order for three areas to become more positive: 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 three 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 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).
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](http://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](http://www.ncagt.org)

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 2006-2007

- Brunswick County – 11,014 Students
- Duplin County – 8,767 Students
- Elizabeth City/Pasquotank County – 5,951 Students
- Guilford County – 67,768 Students
- Hickory City – 4,447 Students
- Lenoir County – 9,685 Students
- Moore County – 11,927 Students
- Roanoke Rapids Graded School District – 2,906 Students
- Robeson County – 23,537 Students
- Rowan-Salisbury – 20,568 Students
- Thomasville City-Demonstration Site – 2,561
- Wake County – 120,297 Students

Attachment A:
Bi-Racial Data Chart

Note: Data was provided during the RFP Process by the districts. Gifted Placement Data was collected August 2007 after students were nominated in April 2007.