Bright IDEA: Interest Development Early Abilities, Javits Research 2004-2010
The American Association for Gifted Children, Duke University and
North Carolina Department of Public Instruction, Exceptional Children Division

Bright IDEA Training	Instructional Strategies	Evaluation
Introduction to Training and Goals for Training (Watson, Hargett and Gayle)	• Presentation of NC Head Count Data • Darity Report	• Discussing and Reflecting on NC Data and Rationale for Bright IDEA
- **Introduction to Rigor and Gifted Methodologies**, - Concept-Based Curriculum - Differentiated Instruction and Cultural Diversity (Hargett, Trainer)	• Direct Instruction and Interaction • Guided Practice • Scenarios • Research-Based Strategies	• Examining a Rigor Rubric • Reflecting and Mapping Ideas • Mapping their Thinking
NC State Standards Common Core Standards (Hargett & Gayle, Trainers)	• Unpacking the standards on Bloom's Revised Taxonomy.	• Charting the standards by grade level and subject on Bloom's Template. (In Pairs and in groups) • Reflecting and Charting Thinking
- Bloom's Revised Taxonomy (Andersen) **- Marzano's New Taxonomy on Educational Objectives** (Hargett, Trainer)	• Direct Instruction of Taxonomies • Guided Practice	• Charting the standards using Bloom's nouns and verbs to raise the level of rigor • Significance of Marzano's Taxonomy on Student Interest and Efficacy • Reflecting and Charting Thinking
Multicultural Literature: Fiction/Non-Fiction – © 2000 to 2009. (Hargett and Gayle and Gifted Coordinators, Trainers)	• Literature Circles • Brainstorming Big Ideas and Standards to be addressed by text. • Selecting Texts for Developing Units	• Charting the big ideas on a selected text, based on UBD's definitions and Template. (In Pairs) • Planning for unit design.
Building Thinking Skills (Parks & Black) (Parks, Hargett, Gayle and Gifted Coordinators, Trainers)	• Direct Instruction with Model Lessons and Thinking Skills Research • 5 Analysis Skills: Describing; Classifying; Sequencing; Finding Similarities and Differences; and Analogies • Think-Pair-Share • Speaking in complete sentences.	• Teaching a sample lesson to another educator and they reflect together on the results. • Producing a timeline for teaching and integrating into curriculum per grade level. • Students enthusiastically love doing the lessons. • Teachers report they see results on vocabulary

	• Graphic Organizers	development.
Bright IDEA Training	**Instructional Strategies**	**Evaluation**
Multiple Intelligences (Gardner) Hargett & Moirao, Trainers	• Multiple Intelligent Centers: Linguistic Center (ex. Word Smart) • MI Journals • MI Instructional Strategies integrated with standards, gifted intelligent behaviors and learning styles.	• Designing 3 centers after training and developing a plan for rotation of MI centers for the year. Implemented Word Smart as a main focus for the year by changing performance tasks. • Observing by Trainers with feedback
Differentiating for the Young Child (Smutny & von Fremd) (Hargett and Gifted Coordinators)	• Creative Writing (Essays, stories and poems) • Research Process • Tiered Lessons – Multiple Intelligences (Gardner) •	• Writing summaries and making presentations of differentiated strategies for the classroom.
Learning Styles Resources by Silver/Strong (Dan Moirao, Trainer) 4 Days of Training in first year with final coaching and training during Summer Institute.	• Window Notes (Four Styles of taking notes) • Do You Hear What I Hear? • Designing Hooks • Inductive Learning & Writing • Interpretive Writing • Persuasive Writing • Concept Attainment • Problem Based Models • Concept Definition Maps • Cooperative Learning • Task Rotations • Scenarios	• Writing performance tasks across standards, learning styles, interest and graduated levels of difficulty using a tiered menu. • Developing performance tasks for lessons and units. • Journal Writing
Gifted Intelligent Behaviors: - Habits of Mind (Costa & Kallick) - Talents, Attributes & Behaviors (Frasier) Costa & Kallick – 3 days Frasier – 3 days, Cohort 1 (Hargett and Mentors)	• Instructional Strategies for Integrating Gifted Intelligent Behaviors into lessons and units of study. • Rubric Training & Collection of Data • Essential Questions	• Rubric to assess students on growth over school year. • Journal Writing and reflecting on each session.
Understanding by Design, Stage 1 (Hargett, Gayle and Gifted Coordinators)	• Big Ideas • Stage 1 Design • Six Facets of Understanding • GRASPS • Scenarios	• Unpacking texts for big ideas. • Designing GRASPS and developing six facets for lessons and units.

Bright IDEA Training	Instructional Strategies	Evaluation
Teaching Math to Young Children. (John Olive, UGA, Trainer) Using text: Extending the Challenge in Mathematics for Gifted (Sheffield) **Instructional Math Strategies and Performance Tasks,** Moirao, Trainer	• New American Lecture • Research on Number System and Teaching • Strategies for Tiered Lessons • Standards aligned with Performance Tasks	• Solving Number Problems • M & M Problem Solving Activity and Presentation • Writing Math Performance Task Rotations on Learning Styles for Centers
Formative Assessments All trainers focused on assessments within their training. (NC Training on formative assessment, Hargett, Trainer and local coordinators)	• Direct Instruction on Assessments and Learning Targets • Instructional Strategies for Lessons	• Developing assessments for learning targets based on standards • Written lesson plans by grade levels
Summer Institute Training – one week, held at the end of the first year of training. Small group review sessions are available on request for clarification and depth of understanding.	• Culminating Strategy: Produce an interdisciplinary concept-based unit that integrates all training into one product. (See Template.) • Reflection Sessions daily • Expert Coaching and Mentoring	In pairs, teachers, principals and curriculum specialists create Concept-Based Units from one or more of the multicultural texts. Due at the end of the week. The units are taught in the following school year and revised. Participants attend a follow-up summer institute to develop a deeper understanding on teaching the units and assessing performance of students.

This training was conducted in the first year with follow-up observations and coaching through the 3 years for each cohort group.
2004-2007 - Cohort – 1: 6 Districts with 2 schools each: 2 teachers in each school at grades K-2
2005-2008 – Cohort – 2: 4 Districts with 2 schools each: 2 teachers in each school at grades K-2
2006-2009 – Cohort – 3: 6 Districts with 2 schools each: 2 teachers in each school at grades K-2

A major evaluation component included a Teacher Fair held in April of each year in Raleigh by The North Carolina Department of Public Instruction and the American Association for Gifted Children for the research districts to present teacher and student products and their feedback on the training and student outcomes. Student products included written essays, art and artifacts from social studies, math and science projects. Teacher products included lesson plans and a power point and pictures of classroom activities. Teachers, Principals and the Superintendent shared their experiences about the training and the impact on teaching and learning.

Developing 21st Century Skills, Knowledge and Dispositions in Students
Coordinating Early Intervening Services (CEIS) – Exceptional Children Division, NCDPI

Bright IDEA Training for CEIS - Executive Overview

CEIS Goal: To intervene early with students who need additional academic and behavioral assistance in a general education environment by developing their skills, knowledge and dispositions through a research-based curriculum model, Project Bright IDEA. (Training regular classroom teachers using Federal Disproportionality Funds.)

Exceptional Children Goals: (Training Special Education Teachers)

1. Prepares children to exit EC classes and perform at successful academic levels
2. Supports the Reading and Math Foundations courses and moves students to a deeper level of understanding
3. Supports and Enhances Positive Behavior Models.

Professional Development: Options Based on Need

- **Two day overview/training on philosophy, pedagogy and data on** *Developing 21st Century Skills, Knowledge and Dispositions in Students* (Beyond Labeling)
- **Four clusters of training –**
    - **HOM/GIBs Training (three days)**
    - **MI/Learning Styles (three days)**
    - **Thinking Skills (Beginning and Advanced) (four days)**
        - **Beginning Thinking Skills – Parks/Black**
            - **Grades - K-2 (Overview ½ day and ½ day teacher designing lessons)**
                - **Follow-up (Two separate days (two months between follow up sessions)**
            - **Grades – 3-5 Parks/Black – (Developmental/Infusion) (Two days**
                - **Follow-up (Two separate days (two months between follow up sessions)**
        - **Advanced Thinking Skills – (Three days)**
            - **Middle of Implementation – ID High Flyers at second follow up**
    - **Curriculum Writing Institute (four days)**
- **Four clusters of One/two day follow-up training – Consultant and/or Principal, School-based Leadership and Designated Central Office Leadership may conduct. (Two hours of training for leadership after each PD.)**

Note: Timeline and Training Costs are determined by the needs of the districts and the number of participants.

Bright IDEA 2: A Javits Research Program funded by the US Department of Education 2004-2009
K-2 Observation Tool For Instructional Review
(Buddy System Tool, Not for Evaluation)

School: _____Date of Visit_____

Teacher: _____Buddy Teacher_____Grade Level _____

Essential Question: How are Bright IDEA classrooms different from regular K-2 classrooms?

Instructional Practices (What)	Evidence of Implementation	Application of Best Practice (When & How)	Notes
Rigor and Relevance Using Bright IDEA Concept-Based Units	• **Essential Questions** • **Generalizations** • **Gifted Intelligent Behaviors** • **Six Facets of Understanding** • **Bloom's Revised Taxonomy** • **Marzano's Taxonomy** • **Multicultural Materials**	• **Charts on Evidence Displayed** • **Evidence not lost is a sea of store bought bulletin boards** • **Student Products displayed** • **Display information as taught** • **Teacher/Student Discussions** • **Think, Pair, Share** • **Daily, weekly, other**	
Gifted Intelligent Behaviors **Habits of Mind (Costa/Kallick)** **TABS (Frasier)** **Multiple Intelligences**	• **Learning Style Centers (Task Rotations)** • **Multiple Intelligences Centers** • **Integrated into units and lessons in a natural way**	• **Charts Displayed as Taught** • **Teaching styles** • **Student Products displayed** • **Teacher/Student Discussions** • **Think, Pair, Share** • **Daily, weekly, other**	

Instructional Practices (What)	Evidence of Implementation	Application of Best Practice (When & How)	Notes
Thinking Skills (Sandra Parks)	• **Students & Teachers Speaking in Complete Sentences** • **Open-ended inquiry** • **Use of Manipulatives and Picture Cards** • **Graphic organizers (Parks, Black & Swartz)** • **Integrated into Curriculum** • **Meeting Minimum timelines**	• **Problem-solving assignments that focus on real world experiences** • **Daily assignments involving thinking skills concepts/skills** • **Teacher/Student Discussions** • **Think, Pair, Share** • **Student Products displayed** • **Display information as taught** •	
Concept-based Units (Integrated/Interdisciplinary) Problem-centered, thought-provoking classes	• **Organizing Concepts based on SCOS** • **Assessments Identified** • **Posting generalizations and essential questions that reflect the unit** • **Integration of thinking skills, multiple intelligences and learning styles** • **Problem Solving Task Rotations** • **Cooperative learning groups designed for nurturing potential** • **Socratic dialogue** • **Gifted Intelligent Behaviors**	• **Daily, weekly, ongoing** • **How Many Taught in the Year** • **Language Arts** • **Science classes** • **Social Studies** • **Math classes** • **Arts** • **Other** • **Think, Pair, Share** • **Student Led Groups**	

Instructional Practices (What)	Evidence of Implementation	Application of Best Practice (When & How)	Notes
Learning Centers (Silver & Strong) **Flexible grouping**	• **Charts with different groups according to abilities, interests, skills, culture, learning styles and multiple intelligentces** • **Student groups that are homogeneous and/or heterogeneous in readiness level** • **Student collaboration and cooperation** • **Teacher facilitator** • **Student Led Groups**	• **Daily, ongoing** • **All subjects** • **Needs based** • **Think, Pair, Share** • **Student Led Groups** • **Teacher as Facilitator**	
Authentic Assessment	• **Performance-based tasks** • **Self-reflection opportunities** • **Response journals** • **Writing folders** • **Rubrics** • **Student Interest Inventories** • **Pre and Post Assessments on Selected Units with Rubrics on Gifted Intelligent Behaviors**	• **Ongoing** • **Daily** • **Weekly** • **All areas**	
Concrete Experiential learning with variety of Resources for Differentiation	• **Simulations/Real World** • **Multicultural materials** • **Professional Books** • **Field trips** • **Manipulatives** • **Student groups** • **Computer Utilization**	• **Daily, ongoing** • **All areas** • **Innovative Classroom design** •	

	• **Software Available**		
Instructional Practices (What)	**Evidence of Implementation**	**Application of Best Practice (When & How)**	**Notes**
Instructional Planning	• **Designs content-rich, problem-centered differentiated curricula that relate to and expand the objectives of the SCOS.** • **Explores generalizations and essential questions that align with stated objectives.** • **Buddy Visits**	• **Daily; ongoing** • **Needs Assessment for Instruction** • **Feedback and Reflections on Visits**	
Additional Best Teaching Practices			

Comments:

Note to Teachers: Use as a guide when visiting your buddy. You do not need to fill out every block, but rather take notes on the things that you observe or talk about with your buddy. As we implement this year we will want to revise this tool so that it is easy to use and valuable for collecting information that will help us improve the training and implementation of Bright IDEA. Your input is important to us in this process so make suggested revisions to the instrument.

2. Bright IDEA Professional Development and Curriculum Design

The transformational model underlying Bright IDEA is a more rigorous, comprehensive and multi-dimensional approach to learning than traditional or progressive approaches. The key aspects of the model that make it uniquely powerful and flexible are:

Building Thinking Skills. The five cognitive skills (describing, finding similarities and differences, sequencing, classifying and forming analogies) are taught to K-5 students through *Building Thinking Skills* (Parks and Black), a research-based developmental program designed on the relevance and prevalence of analysis skills in academic disciplines and found on all major standardized tests. These analysis skills are required in all content areas and are aligned with the North Carolina Course of Study.

Building Thinking Skills is developmentally sequenced to provide highly effective verbal and nonverbal reasoning activities to improve children's vocabulary, reading, writing, math, logic, and figural/spatial skills, as well as their visual and auditory processing. Each skill is presented first in the semi-concrete figural/spatial form and then in the abstract verbal form. The students learn to analyze relationships between objects and words. Students observe, recognize, and describe characteristics, distinguish similarities and differences, and identify and complete sequences, classifications, and analogies. These processes help students develop thinking and communication skills that lead to deeper content learning. Activities are modeled to reinforce reasoning skills and concepts.

This program immerses students in background knowledge through content that is rigorous in language and vocabulary development. Students learn mental models that help them build intellectual capacity and improve in academic achievement. Teachers and students use complete sentences when speaking which helps the students form correct language and to write with better sentence structure and to develop and produce descriptive writing paragraphs. A major focus is on developing an early understanding of geometry and number sense. Building Thinking Skills was designed to improve academic success for all students by aligning it with standards and the *Cognitive Abilities Test.* This program provides success for all learners, including those with Second Languages and other exceptionalities.

Gifted Intelligent Behaviors align with 21st Century Skills, described as "soft skills" by business as needed to be successful in the workforce. The North Carolina State Board of Education has adopted a similar set of skills in their mission to prepare *Future Ready Students*.

Bright Tomorrow aligns the Habits of Mind (Costa and Kallick) and Talents, Attributes and Behaviors of gifted people (Frasier) into behaviors necessary for academic success. Concept-based assessment units are designed by teachers to include rubrics for observing a student's growth on the behaviors over the school year. The Gifted Intelligent Behaviors support 21st century learners' requirement to have academic skills; soft skills (job skills demanded by business) and the interest and motivation to learn and collaborate for school and life. Examples of GIBs results are at the end of this Appendix.

Multiple lntelligences and Five Minds for the Future (Gardner) are incorporated into the philosophy that drives the curriculum design and professional concepts. Multiple Intelligent Centers create an environment for flexible grouping and differentiating around interests, performance tasks, skill development, learning styles and gifted behaviors.

"Deconstructing" the Common Core Standards and The North Carolina Standard Course of Study (NCSCoS) for the Big Ideas (McTighe, Wiggins) using Benjamin Bloom's Revised Taxonomy (Anderson). Bloom's Taxonomy provides a strategy for increasing the rigor in the standards by using the verbs in the revised taxonomy to create the performance tasks in lessons and units. The NCSCoS is in the process of revision for the Common Core Standards and Bright Tomorrow training will reflect the changes.

Interest Development Marzano introduced the Self-System in *The New Taxonomy of Educational Objectives* that focuses on student interest. The "ID" in "Bright IDEA" stands for "interest development," meaning that Bright Tomorrow is based on the concept of developing pathways through learning that engage students' core interests. The goal is to generate within students a passion for learning, working and being part of a community of learners with similar interests. Their interests can be enhanced and supported through Multiple Intelligent Centers and within the curriculum units designed by teachers and revised as students participate and give feedback to the teachers through their reflection sessions that occur after each lesson in the unit. Students' interests and aptitudes can be observed through the teaching of the gifted intelligent behaviors and documenting their growth on rubrics designed for each behavior.

Understanding by Design, Stage 1 (McTighe, Wiggins) provides a framework for learning how to design essential questions, generalizations and facets of understanding into their lessons and units. Other components of UBD are used in the curriculum template for developing a unit of study.

Strong theoretical base. Teachers are provided a strong theoretical framework from which to operate and evolve their practice. In addition to Bloom (revised), Marzano, and Gardener, this framework includes a carefully selected set of readings and practicum designed to be comprehensive but time efficient. It provides a strong coherence as teachers and curriculum directors brainstorm new ideas and approaches using a common language that becomes the "Bright IDEA Way" to teach.

Aim for the top 3-5%. The Bright IDEA curriculum is aimed at the gifted range of intellectual abilities. Research shows that the curriculum can be calibrated at the gifted level and, if taught in an adaptive way, work for students at all levels. This is an effective way of changing teachers' dispositions so that they have high expectations for all children. It also fosters collaboration and problem solving among students as they work on a variety of performance tasks.

A New Taxonomy of Educational Objectives. (Marzano) develops understanding of the self-system and cognitive and meta-cognitive systems to help with the design of the rigor in the curriculum. The thinking skills and gifted behaviors are reinforced through this taxonomy.

> *"Enhancing meta-cognitive and self-system thinking is central to developing self-regulation, which some psychologists assert, should be a fundamental goal of education. As Bandura (1977) notes: A fundamental goal of education is to equip students with self-regulatory capabilities that enable them to educate themselves. Self-directedness not only contributes to success in formal instruction, but also promotes lifelong learning, according to Lynn Erickson, provides fresh ideas and a set of thinking protocols to help us to remember that a primary focus in education must be to develop the mental abilities of our students." (Marzano, Kendall, 2007)*

Conceptual Design. provides the framework for implementing the curriculum in the classroom. Teachers and principals partner to design, develop and teach a unit of study that includes universal concepts, essential questions, generalizations, big ideas, six facets of understanding, assessments and other components. This process provides strong scaffolding for knowledge retention and integration and makes teachers' learning task design more meaningful and powerful. Units are developed during a five-day summer institute at the end of the first year after training on all of the components have been completed and taught to students. Teachers,

principals and curriculum coordinators collaborate to create curriculum units, based on the standards and using high-quality, current fiction and non-fiction multicultural literature. Creating concept-based units require that teachers understand all of the training components. Teachers become innovators as they teach their units and revise them.

Collaboration. Teachers, principals and curriculum specialists collaborate as they brainstorm, share ideas and edit the concept-based units. Units are designed for multi grade levels and can be taught in a variety of ways depending on local schedules. All units become available to the general Bright IDEA community and are edited as they are taught. The units provide a rich resource for teachers to adapt, innovate and use their own creativity and interests to benefit the learning styles of their students. Students assist in creating new projects that become part of the units. Teachers see the potential of adding digital resources and providing strategies that get students into high-level problem solving and decision-making.

Learning Styles. (Silver and Strong) of students are addressed through performance task rotations within the Multiple Intelligent Centers. The four learning styles provide opportunities for students to demonstrate their understandings of the curriculum through ways they can be successful and also challenges them to learn different ways to express themselves.

Mathematics. (Tzur and Olive) for young children focuses on teacher development in math concepts and the number system. The Bright IDEA research found that most elementary teachers are not confident in teaching math and do not understand the number system well enough to teach it to students who have high needs. This training provided *AHA! moments*. Since school districts have different math text adoptions, it is critical for teachers to have a deep understanding of the number system and how to identify and assess student needs.

Multicultural Literature. Bright IDEA units are built around high-quality current literature, fiction and non-fiction that present content in a rich, multicultural and multidisciplinary way. Teacher-designed, multi-dimensional experiences, supported by principals and curriculum coordinators, become the driving force for student learning. Rich literature and other media sources aligned with students' interests become the impetus for teaching the state standards. Online technology provides instant access to bringing the world into the classroom to support the curriculum.

Other key aspects:

Cross Curriculum Integration. Curriculum integration through the units provides students with a deeper understanding of concepts, skills and knowledge, especially in the early years. A first and second grade unit on Leonardo and the Renaissance includes literature, science, art, history, math, engineering and the gifted intelligent behaviors exhibited by the geniuses of the Renaissance. The lack of artificial distinctions makes it much easier for students to internalize the skills and knowledge and engages them around multiple interests and abilities.

Changing educators' dispositions to believe in high expectations and rigorous learning for every child: Teachers learn that all students are capable of high-level learning. Thus all units and other classrooms experiences are designed with significant academic rigor and flexibility for meeting the needs of all students.

The curriculum component is designed to meet the needs of students to become independent and lifelong learners. Every training component for the educators is aligned into the curriculum template to help teachers take new educational theory and make it practical for students. When teachers see the success of students through this model, they become excited about their own abilities to create curriculum and to get students engaged in real world problem solving.

Student powered. All children have talent and initiative to do well in school. Bright IDEA taps into and amplifies these fundamental drives and results in students that are "bought into" the activities in the classroom. This makes Bright IDEA classrooms "student powered" in, that students are largely self-organized and self-motivated as they embrace the educational experience.

Common Understandings. Bright IDEA principals and school based curriculum specialists go through the same training as teachers. Using a common understanding of best practices and shared expectations, principals can more easily mentor and evaluate teachers and all parties in the school can communicate with a common language.

Parent Centers. are designed to reflect the teaching in the classroom and parents attend workshops on gifted behaviors, learning styles and strategies for helping their children.

A Buddy System Observational Tool assists the teachers as they observe each other's classrooms. This tool helps 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.

Bright IDEA-2 Educator Disposition Questionnaire

Javits Research Funded by US Department of Education -2004-2010

Design and Validation Process - Summary Report

The process of developing and testing the validity/reliability of the Educator Disposition Questionnaire for project Bright IDEA-2 proceeded through four phases. Below, the project's evaluator, Dr. Ron Tzur, provides a summary of this 4-phase process.

Phase 1: Generating the Questionnaire

The evaluator interviewed the director of project Bright IDEA-1 (Gayle) and the principal of one elementary school (Thomasville) that participated in that project (Lupton). These interviews brought up a long list of issues that pertain to changes in teachers' understandings and/or practices as a result of their participation in professional development activities of project Bright IDEA-1. From this list, the evaluator then generated the first draft of a Teacher Questionnaire, which consisted of 90 statements and several biographical information questions.

Phase 2: Expert Construct (Conceptual) Validity

The first draft was sent to nine (9) experts in the field of gifted education and minority students. Each expert was asked to provide one of three responses: (a) keep the item, (b) change the item, or (c) omit the item. The evaluator summarized the experts' responses and maintained 71 statements to which all (or all but one) experts checked the "keep the item" option. These 71 statements were then randomly ordered to comprise the second draft of the Teacher Questionnaire. Next to each statement a teacher (respondent) could choose one of 5 levels of agreement: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree.

In addition, on the basis of expert suggestions, the biographical information was better organized into the following 13 items (underlined items indicate a request to circle one of several choices): name, school, grade one teaches, gender, teaching experience, teaching licensure, race, number of schools taught, academic major, academic minor, highest academic degree, distance from home to school, and National Board Certification.

Phase 3: Administration

Draft 2 of the Teacher Questionnaire was administered by principals from two Bright IDEA-1 schools to 19 teachers, some who participated in the professional development (n=9) and some who did not (n=10). In one of the schools, the same questionnaire was administered again 10 days after the first administration (participants=6, non-participants=6). All 31 questionnaires (19 first pass, 12 second pass) were coded by the evaluator and inserted into a statistical spreadsheet (using SPSS 11).

Phase 4: Statistical Tests for Validity and Reliability

Pearson-R correlation coefficient for test-retest reliability was computed for each item on the responses from the school where the questionnaire was administered twice

(n=12). All items with R < .50 (1-tail significance level p > .05) were omitted; the rest (49) were kept in the same order as they appeared in the second draft.
Somers' D as well as an independent variable t-test comparisons, with participation in Bright IDEA-1 used as independent variable, was computed for each of those 49 items on all first-pass questionnaires (n=19). Twenty-four (24) among these 49 items showed significant level of between-groups difference, whereas 25 were not significant. Such a difference indicates that these 24 items (questions) clearly distinguish between teachers who participated in Bright IDEA activities, thus adding a layer of criterion validity to the established construct (expert) validity of the questionnaire.

Finally, Alpha-Cronbach measure for internal reliability was computed for the final version of the questionnaire (49 items). For all cases with no missing values (n=13), alpha = .68; when removing items that contribute missing values, alpha level found for 45 items was .60 (n=19). This level, though not very high, seems reasonable for the number of respondents and items.

Conclusion:
The 49-item version of the questionnaire, re-titled Educator Questionnaire to include principals and AIG coordinators, was made final. To this final version, an improved set of 15 biographical questions were added as follows (again, underlined questions indicate a multiple-choice response set): person's name, school's name, teaching/educational work experience, number of schools worked, grade person teaches, current role in school, gender, teaching licensure, National Board Certification, distance from home to school, race, academic major, academic minor, highest academic level completed, number of years participating in Bright IDEA.

Note: The final educator disposition questionnaire included 43 items. From the 49 original questions in the original version, some of the questions were combined into one question to make the final number of 43.

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Bright IDEA 2 - Educator Questionnaire Dear educator:

The purpose of this questionnaire is to learn about educators' perspectives regarding their work in school. The first part consists of 15 questions about your background. Please circle the proper number or fill the information requested. Your name will be used only to organize data; it will never appear anywhere results are used.
The second part consists of 43 statements about your dispositions toward education. Please indicate the extent to which you agree with the statement (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree). Indeed, there are no 'right' or 'wrong' answers, only sincere answers. Thank you so much for providing us with your insights.

Part 1

a) Name: _____	b) School: _____
c) Teaching/educational work experience: _____ Years	d) Number of schools worked (include current): _____ Schools
e) Grade you teach: 0. Kindergarten 1. First 2. Second 3. N/A	f) Current role in school: 1. Teacher 2. Principal 3. AIG Coordinator 4. Other: _____
g) Gender 1. Female 2. Male	h) Do you have a teaching license? 0. No 1. Yes
i) Are you National Board certified? 0. No 1. Yes	j) Distance from your home to school: _____ Miles
k) Race: 1. African American 2. Asian 3. Latino/a 4. Native American 5. White American 6. Other: _____	l) Academic major: 0. None 1. Early Childhood 2. Elementary Education 3. Special Education 4. Psychology: 5. Other: _____
m) Highest academic level completed: 1. High School 2. Two-year College 3. B.Ed./B.A./B.S. 4. M.Ed./M.A./M.S. 5. Ed.D./Ph.D.	n) Academic minor: 1. None 2. Education (any) 3. Arts (specify): _____ 4. Natural Sciences: _____ 5. Social Sciences: _____ 6. Other: _____
o) Years since started with Bright IDEA:	

0. None (not at all / just started)	1. One	2. Two	3. Three or more

Part 2

	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I look for opportunities to learn more about: a) Teaching methods . . . . . . b) The subject matters I teach . . . . . . c) Students' ways of learning	. . . .	. . . .	. . . .	. . . .	. . . .
2	Within the student population of our school only a handful (if any) have a chance to go to college.					
3	I could foster higher academic results had I taught in a school located in a wealthier neighborhood.					
4	To foster creativity among my students I also need to exhibit creativity.					
5	Students learn new concepts best when they actively explore problems.					
6	I cannot demand of students from poor homes to excel academically.					
7	A teacher can learn about a child's giftedness from parents who say their child is gifted.					
8	My administrators allow me to be an effective instructional leader.					
9	I frequently ask my peers for ways to improve my teaching.					
10	A well-behaved classroom is more likely to excel academically than a noisy one.					
11	A teacher must provide a challenging instructional program despite students' difficulties at home.					
12	Academic giftedness depends on a teacher's nurturing effort.					
13	An effective teacher clearly presents to students what s/he expects them to be able to do.					
14	Minority students are more likely to exhibit limited motivation to learn.					
15	An effective teacher tailors the curriculum to the students' experience (e.g., omits parts, adds tasks, changes order of topics).					
16	In my teaching I tend to be flexible and experiment with the unknown.					
17	My satisfaction in teaching derives mainly from					

	students' learning.					
18	Most parents believe that their child is gifted					
19	The key purpose of my questions to students is to figure out if they got the correct answers.					

	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
20	I feel recognized for good work					
21	Regardless of the teacher's intentions and efforts, in every classroom there are several students who cannot reach the intended goals.					
22	Students' unique racial background is an important resource in my planning for instruction.					
23	I continually involve my students' parents in what we do in class.					
24	I seek out opportunities for professional development.					
25	Our school's "report card" accurately reflects our student population.					
26	A teacher should encourage the use of humor in class.					
27	I love teaching: a) Language Arts . . . . . . b) Mathematics . . . . . . c) Science . . . . . . d) Social Studies	. . . .	. . . .	. . . .	. . . .	. . . .
28	An effective, 4-year teacher education program is sufficient for teaching at the K-2 level (hence no further professional development is needed).					
29	White students are more likely to exhibit compliance with school norms and regulations than minority students.					
30	I get frustrated when asked to teach in ways I was not trained.					
31	A teacher should help parents form realistic expectations about their child's giftedness.					
32	Some people use the term 'intimacy' to talk about the desired level of teachers' knowledge of the subject matter they teach. The term intimacy portrays my relationship with: a) Language arts . . . . . . b) Mathematics	. . . . . .	. . . . . .	. . . . . .	. . . . . .	. . . . . .
33	Gifted students are identified at 3rd grade so as a K-2 teacher I do not have to focus on giftedness.					

34	To accomplish my goals I have to consider my students' interests.					
35	I use tasks that set up high-level expectations for: a) My gifted students . . . . . . b) All my students	. . . . . .	. . . . . .	. . . . . .	. . . . . .	. . . . . .
36	I like being a mentor of other teachers.					

	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
37	Consider the following math problem: "We want to know the favorite ice cream flavor of students in our classroom. Collect data about every student's favorite ice cream from the list of flavors: Chocolate, Vanilla, Chocolate & Vanilla (mixed), Other. Use a graph paper to organize your data in a chart and explain what the chart shows." In our school, this problem is suitable for whole-class teaching at grade level: a) K-1 . . . . . . b) 2-3 . . . . . . c) 4-5	. . . .	. . . .	. . . .	. . . .	. . . .
38	A teacher's intuition should guide her/his teaching practice.					
39	I cannot expect students whose language at home is not standard English to excel academically.					
40	In our school, a teacher must devote a substantial amount of energy and time to discipline issues.					
41	My racial background is necessarily a factor in how I 'screen' and participate in the world (teaching included).					
42	Academic giftedness is, pretty much, a matter of heredity (nature, not nurture).					
43	Students learn well when they can monitor their own work.					

The "Non-Negotiables" of Academic Rigor

Academic rigor is an essential characteristic of effective curriculum, instruction and assessment. Students learn when they are challenged to use the full range of their talents and intellectual abilities to address authentic and complex academic tasks in professional and real-life events. All students should have the opportunity to participate in qualitatively different academic environments that build upon their interests, strengths and personal goals. These environments should engage them actively and consistently in sophisticated investigations of materials, texts, interactive technologies and learning activities, requiring them to understand and apply advanced critical and creative processes.

Rigorous academic environments represent true communities of learning, encouraging both students and teachers to be risk-takers engaged in experimental, investigative and open-ended learning processes. Together, members of inquiry-based learning communities can utilize effectively their existing knowledge while striving to create new knowledge. In these rigorous learning environments, students accept greater responsibility for developing and applying a deep understanding of significant concepts, generalizations, essential questions and skills and procedures to problem finding and problem solving for which there are no predetermined limits. As a result of an education reflecting these "non-negotiables," students will become life-long learners and thinkers, capable of independent reflection, self-evaluation and reasoning.

Academic Rigor …

Has Qualitatively Different Academic Environments (More In-Depth, Complex and Abstract Concepts and Ideas)
Builds Upon Interests, Strengths and Personal Goals
Engages Consistently in Sophisticated Investigations of Materials, Texts, Interactive Technologies and Learning Activities
Employs Advanced Critical and Creative Processes
Embraces Teachers and Students as Risk-Takers in Experimental, Investigative and Open-Ended Learning Processes
Utilizes Effectively Existing Knowledge and Creates New Knowledge
Develops and Applies Deep Understanding of Significant Concepts, Generalizations and Essential Questions to Problem Finding and Problem Solving
Sets No Predetermined Limits
Creates Life-Long Learners and Thinkers Capable of Independent Reflection, Self-Evaluation and Reasoning

Rigor Rubric for Educational Programs

	Level Four	Level Three	Level Two	Level One
CURRICULUM	Advanced, sophisticated curriculum consistently builds upon and extends beyond a standard course of study through universal concepts, complex levels of generalizations and essential questions from multiple perspectives within the topic. Students consistently engage in multiple, complex, thought-provoking and ambiguous texts/materials that challenge their thinking and feelings.	Curriculum occasionally attempts to build upon and to extend beyond a standard course of study through universal concepts, generalizations and essential questions from a few perspectives within the topic. Students occasionally engage in multiple complex, thought-provoking and ambiguous texts/materials that challenge their thinking and feelings.	Curriculum focuses on multiple discrete concepts and ideas with little if any articulated connection or overt relationship, particularly as they relate to the design and structure of a standard course of study rather than unifying concepts, generalizations and essential questions. Students rely primarily on one or two textbooks that may or may not be provided by the instructor.	Curriculum develops around topic(s) and exploration occurs through activities. Student outcomes lack articulation. A superficial attempt exists to provide rigor through quantity rather than quality. An over reliance on the textbook as the predominant curriculum is evident. Readings superficially address the topic.
ASSESSMENTS	Multiple types of assessment are used consistently to monitor students' growing understanding of increasing complexity of materials, ideas, issues, and problems encountered throughout the year. The teacher regularly provides for students' daily reflections on their understanding and growth within advanced curricular studies.	Assessments are ongoing, focused and evident through the complexity of materials, ideas, issues, and problems encountered within curricular studies throughout the year. The teacher frequently provides for reflections on students' understanding. and growth within curricular studies.	Assessments are focused and evident through some materials encountered throughout the year. The teacher sporadically provides for reflections on students' understanding and growth within curricular studies.	Assessments reflect a "one shoe fits all" approach with an emphasis upon end-of-unit tests comprised largely of short answer, multiple choice, true/false and/or fill-in the blank responses at the conclusion of unit(s). Little or no opportunity exists for the learner to refine skill(s) or major ideas/concepts.
INSTRUCTION	Instructional delivery of the teacher employs a large canon of research-based advanced instructional strategies and methods within curricular models. Opportunities for understanding the "whys" through scholarly dialogue/discussions are regularly provided and students reflect daily on concepts, complex levels of generalizations and essential questions encountered with rigorous texts. Teacher consistently probes students to deepen meaning and to provide rationale for positions explored.	Instructional delivery of the teacher uses multiple instructional strategies and methods within lessons and sometimes larger curricular models of study to understand complex and sophisticated materials/texts. Opportunities for understanding the "whys" through discussions are frequently provided and students frequently reflect on concepts, generalizations and essential questions encountered with rigorous texts.	Instructional delivery of the teacher uses one or two instructional management strategies (learning and/or interest centers, learning styles, etc.) within lessons to understand complex and sophisticated materials/texts. Opportunities for understanding the "whys," the metacognition of such strategies may or may not be addressed.	Instructional delivery of the teacher assumes students will independently construct meaning from sophisticated materials/texts through appropriate mental models (processes/graphic organizers). Teacher provides little, if any support and is primarily engaged in delivering content and coverage.

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Sample: Gifted Intelligent Behavior Rubric (Each GIB has a rubric)

Thinking About Thinking Meta-Cognition (Reasoning/Memory) Rubric

Literary Selection _____

Assignment:

_____

.	Readiness Exploratory/ Discovery	Early Emergent/ Emerging	Progressing	Early Independent	Independent
Limited understanding of how one thinks/stores information or arrives at a solution/decision.	**A B C D**	**A B C D**	**A B C D**	**A B C D**	**A B C D**
Gathers and organizes materials/resources prior to embarking on a task/decision making.	**A B C D**	**A B C D**	**A B C D**	**A B C D**	**A B C D**
Develops plan(s) to clearly progress from one point to the next point.	**A B C D**	**A B C D**	**A B C D**	**A B C D**	**A B C D**
Habitually notes information others miss when evaluating and reflecting on effectiveness of solutions/products.	**A B C D**	**A B C D**	**A B C D**	**A B C D**	**A B C D**

These activities are noted by: Mastery Learner (A): Interpersonal Learner (B); Understanding Learner (C) and Self-Expressive Learner (D). The A, B, C, and D are conveniently located on each rubric task rotation activities in order to allow the teacher to align appropriate activities with the intelligent behavior and the observable degree of development with the behaviors when working on the activities. By circling the appropriate letter, the teacher indicates which activity, learning style and degree of development of the observable intelligent behavior the student has demonstrated.

Additional Comments:

Student_____Grade Level_____Teacher_____

Teacher's Signature _____

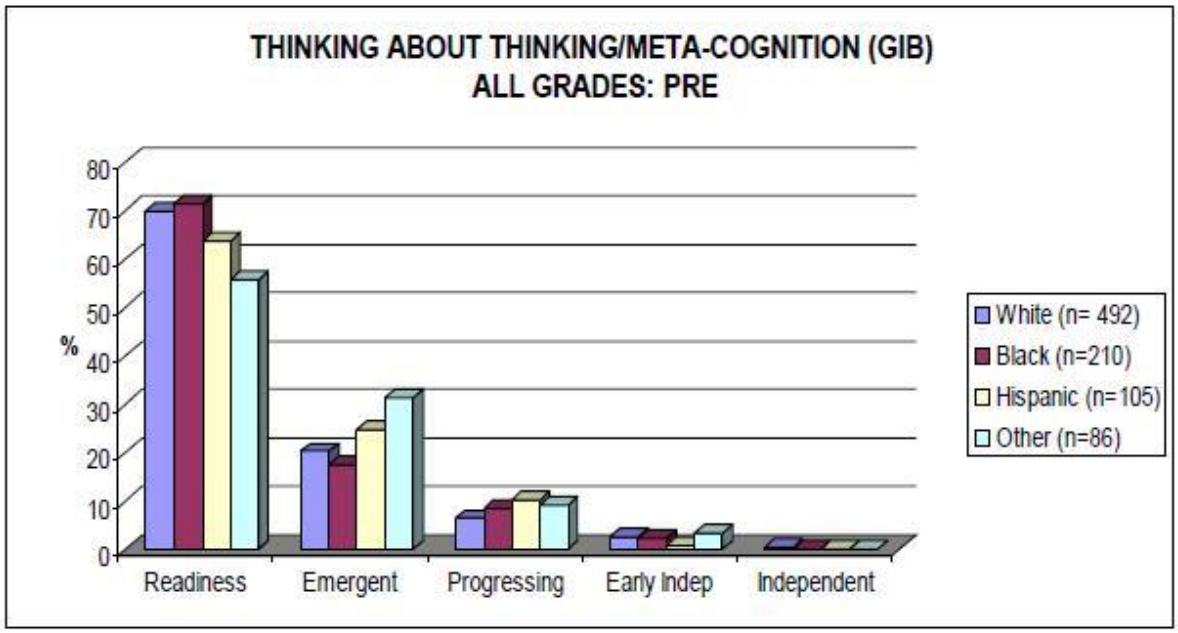
Examples of Results: Gifted Intelligent Behaviors, Bright IDEA 2, Cohort 2, 2005-6

These graphs show the results analysis of students' Gifted Intelligent Behaviors by teachers. Teachers are trained to observe students and grade them in a five-level rubric. These were summarized and graphed by the Bright IDEA team.

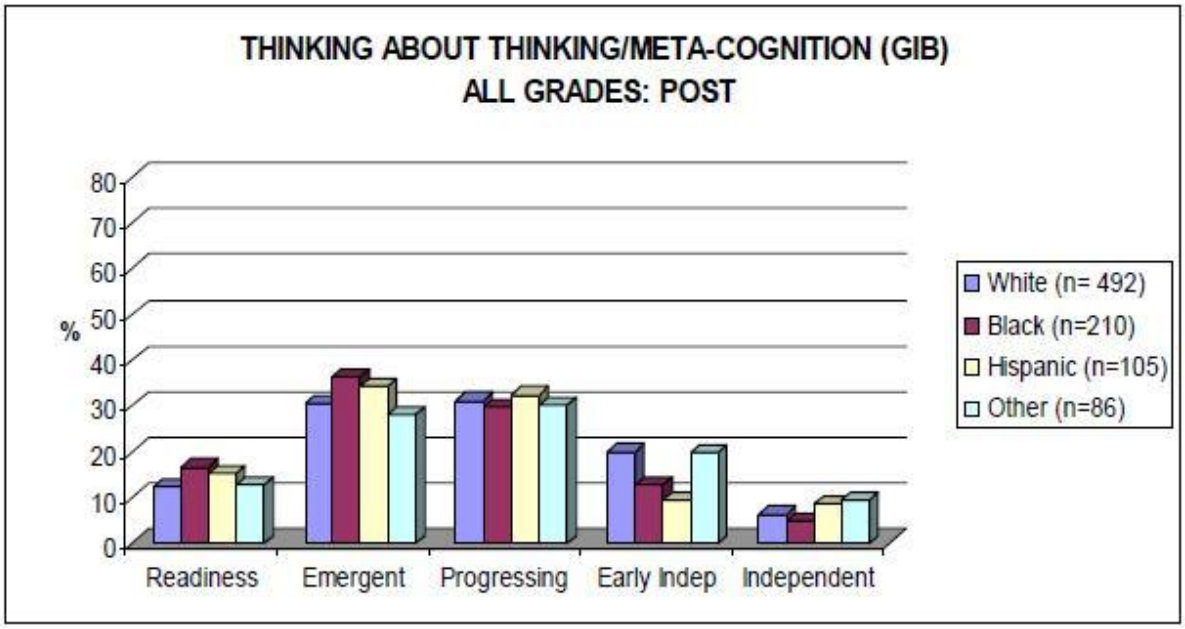
There are 11 GIBs:

- Persisting
- Listening With Understanding/Empathy
- Thinking Flexibly
- Thinking About Thinking/Metacognition
- Questioning and Posing Problems
- Applying Past Knowledge
- Thinking and Communicating With Clarity and Precision
- Creating, Imagining & Innovating
- Taking Responsible Risks
- Finding Humor
- Remaining Open to Continuous Learning

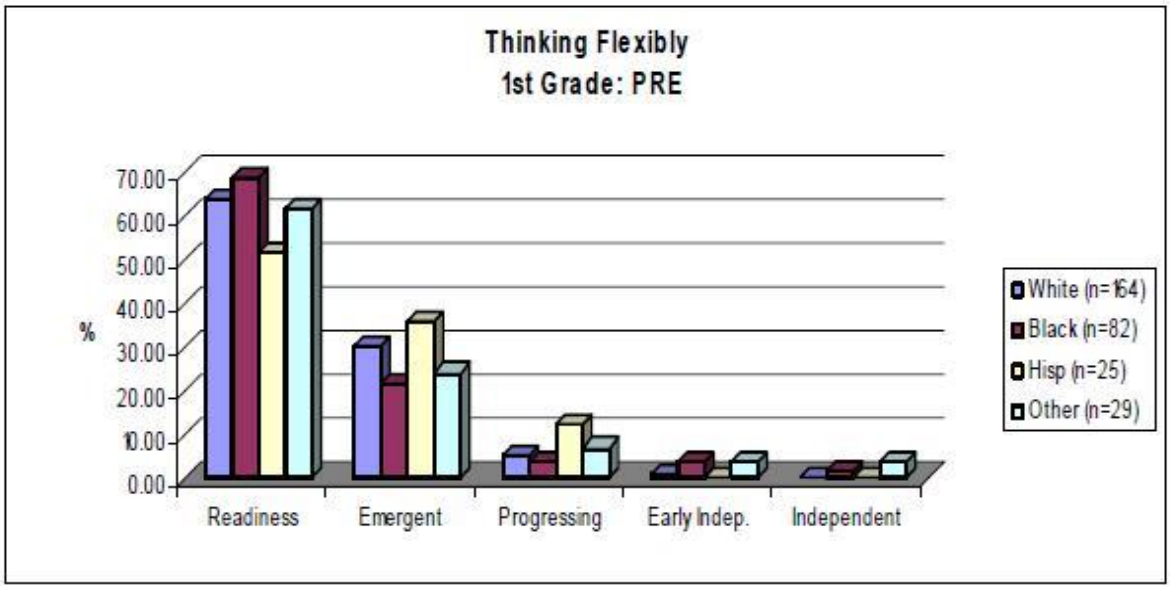
All were captured by teachers, PRE in September and POST at the end of the year. Three are shown starting on the next page, one for all 893 students, one for first graders and one for second graders. As can be seen, the progress from the beginning of the year to the end of the year is significant.



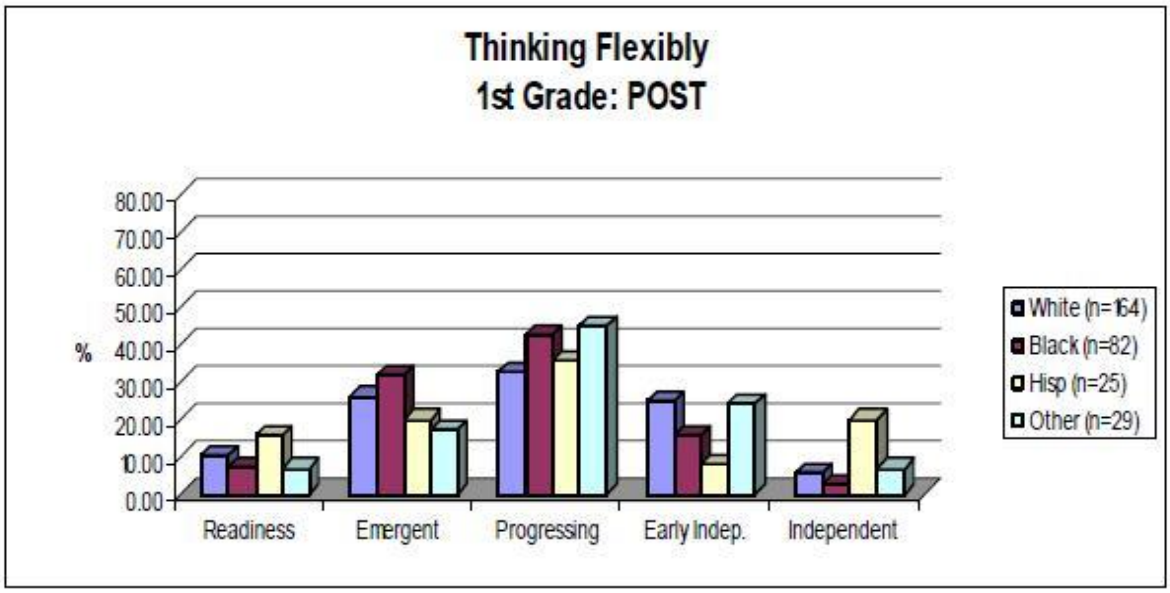
% of Students:	Readiness	Emergent	Progressing	Early Indep	Independent
White (n= 492)	70.12	20.33	6.50	2.64	0.41
Black (n=210)	71.43	17.62	8.57	2.38	0.00
Hispanic (n=105)	63.81	24.76	10.48	0.95	0.00
Other (n=86)	55.81	31.40	9.30	3.49	0.00



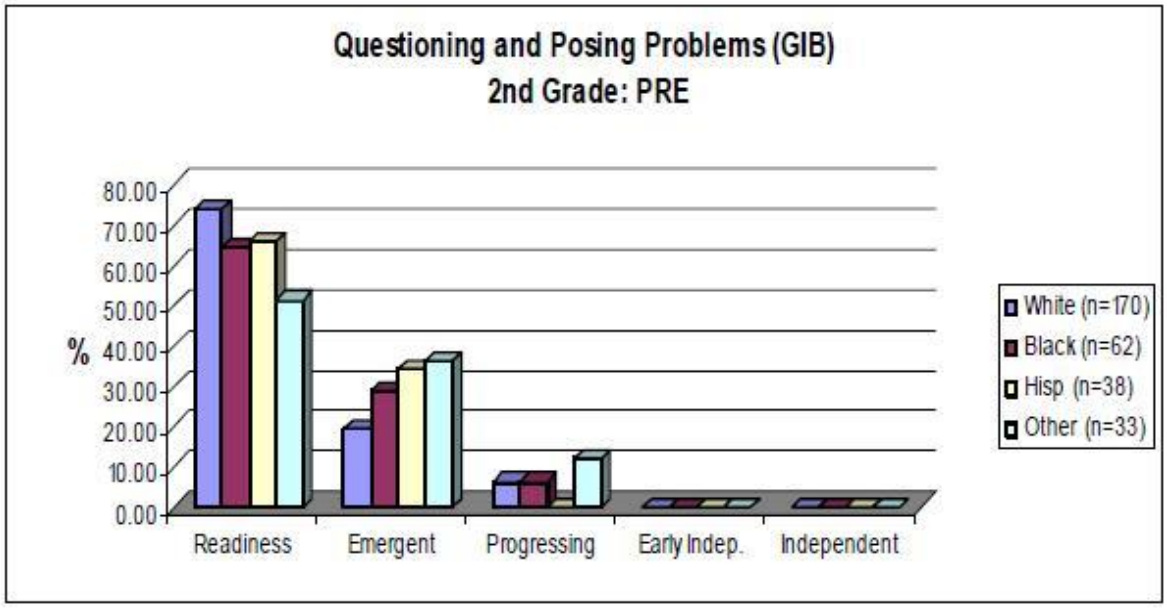
% of Students	Readiness	Emergent	Progressing	Early Indep	Independent
White (n= 492)	12.2	30.5	31.1	19.9	6.3
Black (n=210)	16.7	36.2	29.5	12.9	4.8
Hispanic (n=105)	15.2	34.3	32.4	9.5	8.6
Other (n=86)	12.8	27.9	30.2	19.8	9.3



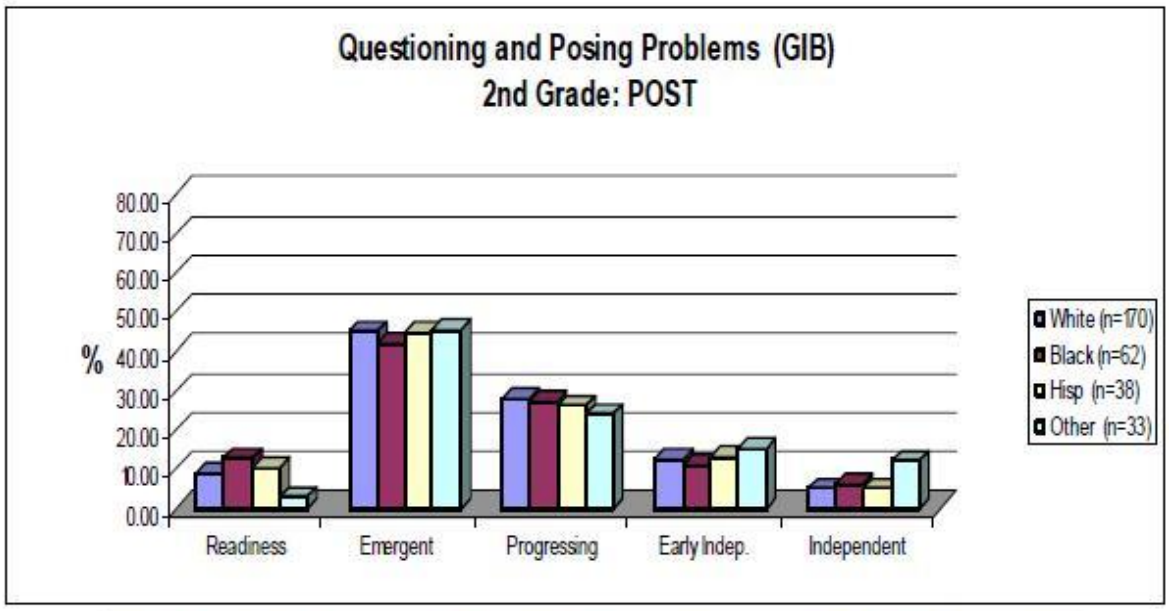
% of Students	Readiness	Emergent	Progressing	Early Indep.	Independent
White (n=164)	64.02	30.49	4.88	0.61	0.00
Black (n=82)	69.51	21.95	3.66	3.66	1.22
Hisp (n=25)	52.00	36.00	12.00	0.00	0.00
Other (n=29)	62.07	24.14	6.90	3.45	3.45



% of Students	Readiness	Emergent	Progressing	Early Indep.	Independent
White (n=164)	10.37	26.22	32.93	25.00	5.49
Black (n=82)	7.32	31.71	42.68	15.85	2.44
Hisp (n=25)	16.00	20.00	36.00	8.00	20.00
Other (n=29)	6.90	17.24	44.83	24.14	6.90



% of Students	Readiness	Emergent	Progressing	Early Indep.	Independent
White (n=170)	73.96	19.53	6.51	0.00	0.00
Black (n=62)	64.52	29.03	6.45	0.00	0.00
Hisp (n=38)	65.79	34.21	0.00	0.00	0.00
Other (n=33)	51.52	36.36	12.12	0.00	0.00



% of Students	Readiness	Emergent	Progressing	Early Indep.	Independent
White (n=170)	8.82	45.29	28.24	12.35	5.29
Black (n=62)	12.90	41.94	27.42	11.29	6.45
Hisp (n=38)	10.53	44.74	26.32	13.16	5.26
Other (n=33)	3.03	45.45	24.24	15.15	12.12