This final report describes the activities of Project Search (Selection Enrichment and Acceleration of Rural Children), a project funded by a federal Javits grant to address the identification of young gifted and talented students from underrepresented populations and to develop a model for providing appropriate services for young, potentially gifted children. The project focused on three pilot school sites in rural areas of the Charleston County School District in South Carolina. All three school served a majority of African American children. The project began with kindergarten classrooms and then added second and third grade classrooms. By the end of the project, staff directly affected more than 450 students and 26 teachers and principals. Assessment instruments were used to evaluate students' intelligence, academics, creativity, and social leadership; student portfolios were also used for identification of the top 10-15 percent of students. The project developed an inclusive classroom model for nurturing giftedness that involved curriculum development and teacher training. Classroom strategies included higher level questioning and dialog, open-ended and project-based assignments, varied materials and hands-on activities with students, and opportunities for self-directed activities. The report includes the final dissemination packet on promising practices, information about assessment instruments, and an evaluation. (CR)
Project SEARCH: Selection, Enrichment, and Acceleration of Rural Children
Final Report

Julie D. Swanson
Final Report for Grant
Under Javits Gifted and Talented
Students Education Program
in
South Carolina

Submitted by:
College of Charleston, SC

Submitted to:
U. S. Department of Education

CFDA Number 84.206A
December 1995
Project SEARCH

Selection, Enrichment, and Acceleration of Rural Children

Funded by the Jacob K. Javits Gifted and Talented Students Education Act, Grant # 84.206A

Promising Practices

Final Dissemination Packet
September, 1995

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Overview and Goals

The primary purposes of this project were two:

* to devise an identification method for students underrepresented in gifted and talented programs; and
* to develop an inclusive model which uses gifted and talented methods and materials with all students for the regular classroom setting.

Highlights include:

- early identification
- inclusive programming for gifted children
- use of gifted and talented strategies with ALL students
- a focus on rural South Carolina schools and their students

LESSONS LEARNED:

- School-wide involvement is essential to change teacher practice. Schoolwide culture shapes the classroom environment.

- Teachers are at working at different developmental levels and must be met where they are.

- Identifying academic potential early is difficult and must be ongoing, using multiple assessments. There is no substitute for personal, one-on-one screening.

- Teachers have had taken many education courses, have participated in numerous workshops and seminars, but they often fall back on instructional habits that they have used for years, those habits that feel most comfortable, least risky. A supportive environment that encourages innovative instruction is key.

- Teachers' fear of failure is an obstacle for experimenting with innovative instruction. Strong support must be in place if the teacher is to step into "uncomfortable territory" of new and innovative teaching strategies. Instructional methods that allow the teacher to be "in charge" are the "safest," and this need for "safety" impacts on changing instructional practice.

- Time to prepare and reflect on practice is essential.
Selection, Enrichment, and Acceleration of Rural Children

Project SEARCH, a three-year collaboration among the SC Department of Education, the College of Charleston, and Charleston County School District, was funded by the Jacob K. Javits Gifted and Talented Students Education Act, Grant No. 84.206A.
Core Processes

One of the major goals of Project SEARCH was the Identification of underrepresented gifted students in rural schools. The following nontraditional methods were used to increase the number of identified gifted:

- **Ravens Coloured Progressive Matrix** is made up of nonverbal items that measure problem solving ability by asking the subject to match designs into matrices. The Raven's tests were developed to assess abilities that involve such skills as making sense out of confusion, developing new insights, seeing connections, mastering and recalling. It was chosen because of its nonverbal nature and because it tests skills that are not taught, but developed. *This instrument was particularly effective in identifying gifted children in this population. It is also used effectively in the identification of gifted ESL students.*

- **Teacher Assessment of Student's Potential**, a teacher checklist, developed by Dr. Lauren Orth, was correlated with the lists of indicators of giftedness generated by Project SEARCH teachers and advisory board members. *This instrument identified children who were strong in school abilities.*

- **Thinking Creatively in Action and Movement**, by E. Paul Torrance, is designed to measure some of the ways that children use their creative thinking abilities, and is particularly appropriate for young children. It has four activities that allow children to show their responses either verbally or by movement. It scores fluency of ideas, the child's ability to imagine himself/herself in an assigned role, and originality of responses. *This instrument worked well in identifying children who had creative strengths.*

- **Peer Nomination Interview** allowed for student input in the identification process and was taken from the work done by Nancy H. Hensel (1991) on identifying social leadership skills in young children.

*A bibliography of assessment materials is included in this packet.*
Core Processes

The other major Project goal was to develop an inclusive model for the regular classroom setting to nurture the students' potential giftedness through Classroom Practice. Through the SUPPORT PROCESSES of Curriculum Development and Teacher Training, successful strategies to be noted were the use, with all children, of

- Higher level questioning and dialogue
- Open-ended and/or project-based assignments
- Use of varied materials
- Hands on activities
- Self-directed activity
Support Processes

The most promising practices in Curriculum Development include:

- A curriculum designed for kindergarten, first, and second grade regular classrooms that has four major focuses based on the characteristics of gifted and talented children:
  - seeing unusual and diverse analogies and relationships
  - task commitment
  - celebrating unusual and diverse interests
  - creativity

The curriculum design has its basis in the methods used to identify potentially gifted students in this population. A sample is included in this packet.

- Project staff used materials appropriate for gifted and talented in Project SEARCH classes with all children. From the successes, a Bibliography of Culturally Appropriate Books for Young, Rural African American Children and a list of Educational Resources Used to Accelerate and Enrich Learning in SEARCH Classrooms were developed and are included in this packet.

- Portfolios of work samples from learning activities done across project classes worked well in identifying the talents and exceptional abilities of the students in Project SEARCH schools and is a promising practice for identifying gifted students in rural schools.
### Samples of Pilot Curriculum

**Project SEARCH**

*focuses on: TASK COMMITMENT*

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PROJECT TEACHER FACILITATED ACTIVITY/IES</th>
<th>PORTFOLIO ITEMS</th>
<th>SUGGESTED FOLLOW-UPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Mysterious Gold &amp; Purple Box</strong></td>
<td>Discussion &amp; demonstration with miscellaneous boxes chosen by each child and described in three sentences as facilitator records.</td>
<td>Picture of imaginary box on Portfolio envelope. Blue book description.</td>
<td>Horton Hatches the Egg</td>
</tr>
<tr>
<td><strong>Sophie's Role</strong></td>
<td>Students will compare, count, and prepare cookies, then take a role, design and prepare cookies while creating a book <em>Cookie Designs</em>.</td>
<td>Cookie design book, photos/video blue book descriptions.</td>
<td>Some Go-Go battery powered dogs, realistic stuffed animal dog and the roller skate with a leash are alike and different than a real dog. Role play with each. Discuss main character's various solutions to the problem of wanting something she could not have.</td>
</tr>
<tr>
<td><strong>I Want a Dog</strong></td>
<td>Discuss ways in which a Go-Go battery powered dog, realistic stuffed animal dog and the roller skate with a leash are alike and different than a real dog. Role play with each. Discuss main character's various solutions to the problem of wanting something she could not have.</td>
<td>Video, imaginary pet pictures and persuasive letter written in blue book.</td>
<td>Books on pets from the school library.</td>
</tr>
<tr>
<td><strong>Galimoto</strong></td>
<td>Discussion of creative vision &amp; found or recycled objects. Challenge the children to think of many, varied and unusual things they can make from telephone wire.</td>
<td>Wire sculpture &amp; explanation in blue book.</td>
<td>Alexander Calder picture book.</td>
</tr>
</tbody>
</table>

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**Project SEARCH**

*focuses on: CELEBRATING UNUSUAL AND DIVERSE INTERESTS*

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PROJECT TEACHER FACILITATED ACTIVITY/IES</th>
<th>PORTFOLIO ITEMS</th>
<th>SUGGESTED FOLLOW-UPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Josephine the Great Collector</strong></td>
<td>Discussion followed by collecting with use of measuring and observing devices. Class creates a box for a cardboard collection box. Emphasize individuality of each contribution and the way an expert has to search and observe. Children will organize individual baskets of shells and give explanation of their method, then classify, count, compare, evaluate and choose one to keep. Browse books on collecting.</td>
<td>Photos: video; Drawing of individual collection (real, imagined or planned).</td>
<td>Media Center books. Teacher can share her own hobbies.</td>
</tr>
<tr>
<td><strong>Brenda's Buttons</strong></td>
<td>Discussion of patterns and sorting. Children will create pattern necklaces.</td>
<td>Student designed pattern art with stickers.</td>
<td>Bead box provided for each class.</td>
</tr>
<tr>
<td><strong>Sylvester and the Magic Pebble</strong></td>
<td>Discussion of creative powers. Children will estimate how many beads it will take them to cover a grid. Beads will be ironed to create &quot;magic medallions.&quot;</td>
<td>Drawings of actual medallions and stories to explain their powers.</td>
<td>Estimating with beads.</td>
</tr>
<tr>
<td><strong>Counting on Frank; Everybody Needs a Rock</strong></td>
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</tr>
</tbody>
</table>

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### Project SEARCH
Focuses on: CREATIVITY

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PROJECT TEACHER FACILITATED ACTIVITY/IES</th>
<th>PORTFOLIO ITEMS</th>
<th>SUGGESTED FOLLOW-UPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherries and Cherry Pits ALL</td>
<td>Discussion of personal stories and individuality. Project teacher will share a character in role play. Class will then draw the character on a large chart paper with individual students drawing the particular feature or detail they remember best.</td>
<td>Drawings and written descriptions of student created characters.</td>
<td>Amazing Grace</td>
</tr>
<tr>
<td>It Didn't Frighten Me K</td>
<td>Discussion of things feared, both real and imagined, recording ideas in two columns on a chart paper.</td>
<td></td>
<td>Student books on scary things imaginary and real.</td>
</tr>
<tr>
<td>Sylvester and the Magic Pebble 1</td>
<td>Continuation from previous lesson.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harold and the Purple Crayon (and other notable picture books)</td>
<td>Discussion of differences between picture books and &quot;chapter books,&quot; emphasizing the important elements of each. Students will browse &amp; share a number of classic picture books and then share their ideas.</td>
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</tr>
</tbody>
</table>

### Project SEARCH
Focuses on: SEEING UNUSUAL AND DIVERSE ANALOGIES AND RELATIONSHIPS

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PROJECT TEACHER FACILITATED ACTIVITY/IES</th>
<th>PORTFOLIO ITEMS</th>
<th>SUGGESTED FOLLOW-UPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Turn About, Think About, Look About Book All</td>
<td>Discussion of shapes in textiles, rugs, flags, etc. Students invited to choose favorite shapes from a collection of manipulatives, tessellate them, then create a design. Browse books on flags and emblems.</td>
<td>Project SEARCH collection of books from Metropolitan Museum of Art.</td>
<td></td>
</tr>
<tr>
<td>It Looked Like Spilt Milk K</td>
<td>Students will observe shapes created in milk spilled in their own plastic plates and then create a classroom banner with torn paper shapes.</td>
<td>Individual torn paper books.</td>
<td></td>
</tr>
<tr>
<td>About Shapes: Ten Black Dots; The Shapes Game; C is for Curious. 1</td>
<td>Shapes will be passed to each student; students will say what they look like to them. Teacher will record discussion before and after.</td>
<td>Pictures with 10 sticker dots and explanation in blue book.</td>
<td>&quot;I Spy&quot; books; Each Peach; Pear and Plum; My Grandmother's Patchwork Quilt.</td>
</tr>
<tr>
<td>Round Trip, Look the Ultimate Spot the Difference Book 2</td>
<td>Discussion of telling a story in shapes. Students will volunteer to tell a story orally with a single shape.</td>
<td>Story in shapes with explanation in blue book.</td>
<td>Two Bad Ants CDB, CDC and other similar format books in Project collection.</td>
</tr>
</tbody>
</table>
Project SEARCH
Educational Resources Used to Accelerate and Enrich Learning in
SEARCH Classrooms

Literature and Nonfiction

Collection of nature books - mainly Usborne and Eyewitness books
Engel, Dinan. *Josephina the Great Collector.*
Williams, Vera. *Cherries and Cherry Pits.*
Shaw, Charles. *It Looked Like Spilt Milk.*
Clement, Rod. *Counting on Frank*
Freeman, Don. *A Rainbow of My Own.*
Williams, Karen. *Galimoto.*
Heath, Amy. *Sophie's Role.*
Johnson, Crockett. *Harold and the Purple Crayon.*
Khalsa, Dayal. *I Want a Dog.*
Yenawine, Phillip. *Shapes.*
Watson, Jane W. *The Mysterious Gold and Purple Box.*
Dr. Seuss. *Horton Hatches the Egg.*
*It Didn't Frighten Me.*

Consumables

felt
georometric shape stickers
blue books
chart tablet paper
wire
stickers - varied shapes, sizes & colors

Manipulatives

large parquetry
ingividual baskets of shells
locker mirrors
beads-varied sizes, shapes, & materials
shape stencils
Measuring and observing devices - magnifying glasses

Sources of Simulations and Learning Center Activities

Discover! Series ........................................... Tin Man Press
.................................................................. PO Box 219
.................................................................. Stanwood, WA 98292

Talking Rocks, A Simulation on the Origins of Writing .............. Simile II
by Robert F. Vernon ................................................................218 Twelfth Street
.................................................................................. P.O. Box 910
.................................................................................. Del Mar, CA 92014
Successful practices in Teacher Training involved ongoing, sustained effort using a variety of approaches to provide teachers with the opportunity to learn new strategies, implement the strategies in their classrooms, reflect on their practice, and engage in dialogue with others in similar contexts. Approaches involved teachers in

- the intensive learning of Summer institutes,
- the stimulation of attending Workshops/Professional meetings,
- Ongoing Conferences with a Master Teacher well-versed in gifted and talented methods,
- the benefits of networking through Whole Group Meetings, and
- Classroom Demonstrations with a Master Teacher that allowed classroom teachers to see in practice, with their students, what they had learned about in theory.

A bibliography of selected books/materials used in training teachers is included in this packet. Staff development plans and syllabi available on request.
Project SEARCH
Bibliographies: Identification, Training, and Instruction

1. IDENTIFICATION -- A Bibliography of Assessment Instruments Used in Identification


2. TRAINING -- A Bibliography of Educational Resources for Teachers and Administrators


3. INSTRUCTION -- A Bibliography of Culturally Appropriate Books for Young, Rural African American Children

Appendix
Identification
Identification Procedure
Project SEARCH

1. **Ravens Coloured Progressive Matrix**
   This instrument is made up of nonverbal tests that measure problem solving ability by asking the subject to match designs into matrices. The Raven's tests were developed to assess eductive ability and reproductive ability. These abilities involve such skills as making sense out of confusion, developing new insights, seeing connections, mastering and recalling. It was chosen because of its nonverbal nature and because it tests skills that are not taught, but developed.

2. **Teacher Assessment of Student's Potential**
   This Teacher checklist, developed by Dr. Lauren Orth, has been correlated with the lists of indicators of giftedness generated by teachers and advisory board members. Teachers will rate students on observable behaviors.

3. **Thinking Creatively in Action and Movement**
   This assessment, by E. Paul Torrance, is designed to measure some of the ways that children use their creative thinking abilities, and is particularly appropriate for young children. It has four activities that allow children to show their responses either verbally or by movement. It scores fluency of ideas, the child's ability to imagine himself/herself in an assigned role, and originality of responses.

4. **Peer Nomination Interview**
   This interview will be administered to all students. The interview will consist of three questions. The interview comes from the work done by Nancy H. Hensel (1991) on identifying social leadership skills in young children. The questions will allow for student input in the identification process.
Checklist of Characteristics Often Seen
In Gifted Preschool Children
developed by Dr. Lauren Orth

<table>
<thead>
<tr>
<th>Child's Name</th>
<th>Your Name</th>
<th>Today's Date</th>
<th>Relationship to Child</th>
</tr>
</thead>
</table>

Please choose the category for each question that, in your experience, best describes the child.

<table>
<thead>
<tr>
<th>Question</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost Always</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is a keen and alert observer; often sees things others miss.</td>
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<td>2. Very persistent; may be stubborn or hard to distract.</td>
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<td>3. Keen sense of humor; sees humor in situations where others may miss it</td>
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<td>4. Adapts readily to new situations.</td>
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<td>5. Exceptional ability in working with puzzles, shapes, or numbers.</td>
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<td>6. Strong sense of idealism and justice; concerned with fairness and questions of right or wrong.</td>
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<td>7. Self-sufficient; wants to do things for him/herself.</td>
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<td>8. Can anticipate the consequences of his/her actions; understands cause and effect.</td>
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<td>9. Shows interest in &quot;adult&quot; concerns (such as death, religion, sex, war).</td>
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<td>10. Enjoys problem-solving; can produce several different solutions to a problem.</td>
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<td>11. Shows imaginative use of toys and adapts common objects for inventive purposes.</td>
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<tr>
<td>12.</td>
<td>Enjoys collecting, sorting, and grouping things.</td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Almost Always</td>
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<tr>
<td>13.</td>
<td>High expectations of self &amp; others (may lead to frustration).</td>
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<tr>
<td>14.</td>
<td>Eager to try new things; seeks adventure and challenge.</td>
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<tr>
<td>15.</td>
<td>Finds patterns &amp; explores relationships between things, people, and situations.</td>
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<tr>
<td>16.</td>
<td>Unusual awareness of others' feelings. Emotional sensitivity may be very intense.</td>
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<td>17.</td>
<td>Vivid imagination; comes up with original, unlikely ideas.</td>
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<tr>
<td>18.</td>
<td>Able to think abstractly - saying, for example, &quot;Where does space end?&quot; or &quot;When did time begin?&quot;</td>
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<td>19.</td>
<td>Strong curiosity; asks endless questions about the how and why of many things.</td>
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<tr>
<td>20.</td>
<td>Is able to manipulate situations to get what he/she wants.</td>
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<tr>
<td>21.</td>
<td>Highly verbal; extensive vocabulary beyond that of age peers.</td>
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<tr>
<td>22.</td>
<td>Gets into mischief due to boredom or desire to explore; becomes especially restless during routine activities.</td>
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<td>23.</td>
<td>Likes to take charge; tends to influence other children.</td>
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<td>24.</td>
<td>Makes up stories that are vivid and dramatic; relates experiences with a great deal of exactness or elaboration.</td>
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<tr>
<td>25.</td>
<td>Has a wide variety of interests; always seems busy.</td>
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<tr>
<td></td>
<td></td>
<td>Rarely</td>
<td>Sometimes</td>
<td>Often</td>
<td>Almost Always</td>
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<tr>
<td>26.</td>
<td>Is a self-starter; initiates activities.</td>
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<tr>
<td>27.</td>
<td>Notices words on boxes and signs and asks what they are; maybe has begun to read.</td>
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<tr>
<td>28.</td>
<td>High energy level; never seems to get tired.</td>
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<tr>
<td>29.</td>
<td>Willingly assumes responsibility; volunteers to help.</td>
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<tr>
<td>30.</td>
<td>Remarkable memory for rhymes, melodies, TV jingles, directions, and new information.</td>
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<tr>
<td>31.</td>
<td>Comments on different sounds; for example, may show the ability to reproduce correctly sound intonation with instrument or voice.</td>
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</tr>
<tr>
<td>32.</td>
<td>Shows strong interest or talent in some artistic activity, such as drama, drawing, singing, dancing, playing a musical instrument. (Please specify which one/s.)</td>
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<tr>
<td>33.</td>
<td>Enjoys school; does not like to be absent</td>
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</tbody>
</table>
Interview for Peer Nomination

Name ____________________________

School ___________________________

Date _____________________________

1. Who is your best/favorite friend in the class?

2. Whom should the teacher choose to help her teach the children?

3. If you were going to do a puppet show to tell a story, who would you pick to help you?

4. Who is the best person at math in your class?

5. Who is the best reader in the class?

6. Whom would you choose to play with on the playground?

EVALUATION REPORT
JAVITS GIFTED AND TALENTED STUDENTS EDUCATION PROGRAM
S.E.A.R.C.H
CFDA NUMBER: 84.206A
YEAR THREE, 1994-95

Frances S. O'Tuel, Professor Emerita
University of South Carolina
Columbia, SC
(803) 781-3629
Evaluation Report

Javits Gifted and Talented Student Program

CDFA 84.208A, S.E.A.R.C.H.

Year Three, 1994-1995

Frances S. O'Tuel, Evaluator

The following report is presented in several parts:

I. The original goals of the grant and progress toward these goals.

II. The statistical data for Cohort III, Year Three.

II. The statistical data for Cohort II, Year Three.

III. The statistical data for Cohort I for year Three.

IV. The training programs for teachers and aides.

V. The report on support activities.

VI. Dissemination activities.

VII. Conclusions.
I. Original goals of the grant.

Project SEARCH (Selection, Enrichment, and Acceleration of Rural Children) had the following goals:

1. To develop a method of screening youngsters for gifted and talented potentiality at an early age using nontraditional methods.

2. To develop a model program which would nurture this potentiality.

3. To "spread the word" of good practices from the project throughout the state, and

4. Ultimately, to increase the number of students from under-represented population participating in the state-funded gifted and talented program.

The project developed in response to the awareness that in the rural schools of Charleston County almost no children were being nominated to gifted and talented programs. The district attempted to increase the number of nominees by holding staff development sessions on the characteristics and needs of gifted students. Unfortunately, the number did not increase.

As the school district personnel studied the problem, they became aware of a similar problem with Native Americans, Hispanics, and African-Americans, in fact, almost any at-risk population. The isolated nature of the schools, the high number of single parent homes, the large percentage of free lunch recipients, a preponderance of African-Americans whose parents have low educational achievement and unskilled employment, the
difficulty in retaining teachers with high professional training
all contribute to the problem of lack of identification of gifted
and talented and many other educational, economic, and social
problems of rural areas.

It became apparent that some changes in both identification
and curricula would be necessary in order to bring about
different results. The Twelve Schools Project in South Carolina
has been experimenting with alternative identification, but
schools have not reported results that have been adopted by the
State as alternative identification. Even if such was available,
these rural schools do not have students meeting the present
criteria at the end of grade two. The district personnel
pondered whether the lack of a challenging curriculum might be
why potentially gifted students are not able to meet the State
standards. Thus, they decided to focus on early identification,
kindergarten, curriculum development, and teacher training.

The grant was submitted and received funding and the project
was implemented. Three schools were chosen as target schools,
and two schools were chosen as comparison schools. The three
target schools were Minnie Hughes, Frierson, and St. James-Santee
Elementary schools. Angel Oak and Mt. Zion were chosen as
comparison schools. The demographic data on these schools
suggest that they have much in common with each other.

1. They are all in rural locations;

2. They have very high percentages of their students on free
or reduced lunch;
3. They all have had few nominations of students to be considered for the gifted program;
4. The students are predominantly black;
5. The achievement scores for the schools are not high;
6. All but one are Chapter I schools.

The evaluation report from year one listed the number of students by number, gender, ethnicity, and lunch status for the combined target schools and for the combined non-participating schools. The report also compared identified and non-identified students on the identification measures and found a significant difference in scores, as would be expected if the selection procedure has predictive validity. In addition to these two groups, a non-participating comparison group has been identified for Cohort I, Cohort II, and Cohort III from the two comparison schools. These students have been identified just as the ones in the target schools. These two groups can be compared on measures since they are independent groups with similar variances.

At the end of the third year of the project, Cohort I students, identified as potentially gifted using the alternative variables listed, have been evaluated to see if they are eligible for the gifted and talented program in the district based on State standards. Students are identified in most districts at the end of second grade. These reports will be found elsewhere in this report.

Comparisons have been made between the following groups to see if there are significant differences between the performance
of students in participating schools and non-participating schools.

Table 1. Variables on which Comparisons will be made between Participating and Non-Participating Students

<table>
<thead>
<tr>
<th>Measure</th>
<th>Num</th>
<th>Part</th>
<th>Num</th>
<th>NonPart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>StanR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>StanM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>StanR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>StanM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O-L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td>TargID</td>
<td></td>
<td>Nontarg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>samesch</td>
<td></td>
<td>samesch</td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td>TargID</td>
<td></td>
<td>Nontarg</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td>difscho</td>
<td></td>
<td>difsch</td>
</tr>
</tbody>
</table>

5
1. Identification.

A method for screening kindergarten children for potential inclusion in programs for gifted and talented was developed in year one. It consists of data collection on all kindergarten students in the three targeted schools, Minnie Hughes, Frierson, and St. James-Santee elementary schools and in the two nonparticipating schools of Angel Oak and Mt. Zion. The data consist of the following six variables:

- Ravens Coloured Progressive Matrix (Ravens)
- Thinking Creatively in Action and Movement
  - TCAM-F (fluency)
  - TCAM-O (originality)
  - TCAM-I (imagination)
- Teacher Assessment of Student's Potential (TeaAssess)
- Peer Nomination (Nom)

The Ravens represents a measure in the intellectual domain; the TCAM, developed by Paul Torrance, is designed to assess creativity; the TeaAssess is a checklist of teacher observations of student academic behavior; and the Nom is a questionnaire that children in a class respond to regarding who each believes is his or her favorite, who would be best to help the teacher teach, and who would he or she choose to play with (Hensel, 1991).

The identification committee which was selected in the first year of the project met at the end of Year Two to select the Cohort II group. The same occurred at the end of Year Three when Cohort III was selected (Appendix A). The same criteria were
used as for Cohorts I and II, that is the Ravens, three scores from the TCAM (fluency, originality and imagination) teacher assessment, and peer nomination. Students who were in the top 15% on three or more of the six were nominated. Also, any student who scored 90%ile or higher on the Ravens was named. A group was also selected in the nonparticipating schools based on the same criteria. A report of a comparison of the two groups at the end of this year, the third year, to see if there are significant differences in their performance is reported elsewhere in this report. Since the criteria used was the same, no significant difference would suggest that the curricula is not that different in the participating and nonparticipating schools or that curricula alone may not be a significant contributing factor. Additional information on the students identified during 1994-95 will be found in the section Cohort III.

Since the second graders did not meet the state criteria and the measures were not validated, the evaluator ran regressions using data available where the dependent variables were the Metropolitan Reading Comprehension, the Metropolitan Total Mathematics, and the Otis-Lennon. The calculations were made for the second graders and the first graders in 1994-95 (by grade). The variables in the regressions were Ravens, CSAB (although not one of the initial variables, CSAB is available in September of first grade), the three subtests on the Torrance, teacher assessment (kindergarten teacher) and peer nomination. The results report cumulative R squares that are not that high. The
largest was .42 for the Metropolitan mathematics for second grade. The lowest was for the Metropolitan mathematics, .28 for first grade. The Otis-Lennon R square was .40 (available only for second grade). What is interesting is that the Teacher Assessment made the highest contribution for first graders on reading and math achievement and was first for reading and second for math for second graders. The Ravens and CSAB were the highest for the Otis-Lennon. This suggest that kindergarten teachers are reasonably accurate in identifying their best students and that this identification is predictive of later achievement. In view of some previous studies which found teachers were not good identifiers of future giftedness, this may suggest that the training the teachers received on characteristics and needs of gifted did improve their ability to identify these students.

2. Model Program.

The goal to develop a model program to nurture student potentiality focused in the second year and third year on teacher training, demonstration teaching, materials acquisition, curriculum development, and observations with feedback. The effort to assist the teachers in offering a more stimulating and challenging curriculum and to improve their professional competencies has been extensive. The course offered in the summer of 1993 did not have as many of the teachers enrolled as had been hoped. As a result the on-site coordinator set up a course which met during the second year four times for a full day
each, spread out over the school year. Activities included peer coaching, site visitations, readings, classroom strategies, interdisciplinary unit development and journals. In addition, the course offered in the summer of 1994 was better attended and the teachers seem to have conceptualized many of the goals of an improved curriculum. The evaluator attended 20% of the class sessions for this course.

During the third year of the project, the visits in the classrooms were continued and staff development was on-going. The on-site director has developed a notebook which outlines all the activities of the project. It is a comprehensive record of the efforts of the people associated with the project. A report from the Itinerant Lead Teacher is also in the Appendices (see Appendix D).

Teachers in the targeted classrooms were sent to other schools to observe classrooms in order to see other kinds of activities in context and to see what other teachers were doing. They attended professional meetings.

The class sessions included actual model lessons which were taught to them as if they were students; they could go back and use them as presented. The project staff also went to the classrooms to observe and to conduct demonstration lessons which incorporated the teaching strategies presented in the course.

Teachers were asked what materials they needed and these were obtained. In addition, information on materials and demonstrations of using new materials were presented to them in
an effort to broaden their knowledge and perspectives.

The project staff found that personal contact, feelings of reduced isolation by teachers, building administrative support, surveying needs, providing choices, listening to responses, treating teachers as professionals, obtaining materials for the teachers, exposing teachers to additional information, and professional development opportunities were all important in achieving progress toward a richer curriculum and more professionally competent teachers.

3. "Spread the Word."

The specific list of presentations and dissemination activities will be presented under Section VI. Dissemination. Presentations have included Confratute '94 (July), NAGC '93 (Nov), SC Assn of Teacher Educators, Fall '93, SC Early Childhood Conference, Nov '93, and numerous presentations at the College of Charleston. An article on the project by the on-site director was in Roeppe Review (17:4, 1995). Presentations in 1994-95 include National Association for Gifted Children (Nov 94) and the International Conference on Gifted and Talented in Hong Kong (Aug 95).

4. Increase the number of students identified by state standards for inclusion in the gifted and talented program. This is closely related to goal one. Now, at the conclusion of the grant a check of whether the identification system's validity is supported by conventional means and whether a more challenging curriculum can result in the development of potentially gifted
and talented students to the point that they will be identified by the current conventional procedures needs to be made. None of the students identified, or otherwise, met the State criteria for identification as gifted. Thus, the program did not increase the number identified by State means. In view of the small differences between identified and non-identified on achievement, the identification procedure is not validated. This does not mean that it is not valid, but the results do not support it. Based on on-site visits by the evaluator and project staff, an improved curriculum is being offered all the students in the classrooms of the teachers who participated in the program. It may well be that the time elapsed is insufficient for significant gains to be demonstrated. Perhaps, the improvement of Cohort II students on Reading Comprehension will be borne out in subsequent years.

II. Statistical Data for Year III, Cohort III.

The total number of students in Cohort III in both participating and non-participating schools for year three was 281. Of this number, 179 were from participating schools and 102 were from the non-participating schools. The breakdown for year three is as follows:
Table 2. Number of Kindergarten Students in Cohort III by School 1994-95.

<table>
<thead>
<tr>
<th>Students by school</th>
<th>Tot</th>
<th>Participating</th>
<th>Minnie Hughes</th>
<th>Frierson</th>
<th>St.James Santee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>281</td>
<td>179</td>
<td>64</td>
<td>31</td>
<td>84</td>
</tr>
<tr>
<td>Non-Participating</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angel Oak</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mt. Zion</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The breakdown by gender and race by school is in Table 3.

Table 3. Breakdown by School by Gender and Race for Kindergarten Students, 1994-95 in Cohort III.

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>F</th>
<th>W</th>
<th>B</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>133</td>
<td>149</td>
<td>50</td>
<td>223</td>
<td>9</td>
</tr>
<tr>
<td>Minnie Hughes</td>
<td>30</td>
<td>34</td>
<td>1</td>
<td>62</td>
<td>1</td>
</tr>
<tr>
<td>Frierson</td>
<td>16</td>
<td>15</td>
<td>1</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>St.James Santee</td>
<td>43</td>
<td>41</td>
<td>14</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>Angel Oak</td>
<td>28</td>
<td>27</td>
<td>22</td>
<td>30</td>
<td>3</td>
</tr>
</tbody>
</table>
As noted in earlier years all schools have a high percentage of their student body on free lunch. Rural schools are particularly likely to show this. The level of income remains low. A breakdown of the 1994-95 kindergartners on lunch status is reported in Table 4. Lunch status was not available for Mt. Zion, one of the comparison schools. About 80% of the students are receiving free lunch, 88% free and reduced lunch. Table 4 shows the distribution of kindergarten students by lunch status by school for 1994-95.

Table 4. Distribution of Kindergarten Students in Cohort III by Lunch Status by School, 1994-95.

<table>
<thead>
<tr>
<th>School</th>
<th>Total</th>
<th>Free</th>
<th>Redu</th>
<th>Pay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnie Hughes</td>
<td>52</td>
<td>8</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>Frierson</td>
<td>31</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>St.JamesSantee</td>
<td>65</td>
<td>8</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Angel Oak</td>
<td>39</td>
<td>3</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Mt. Zion</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The list of 29 Cohort III students (potentially gifted) from the kindergarten students in 1994-95 in the three targeted schools are below by school:

**Frierson**
Griffin, Jylissa
Lafayette, Arielle
Mack, William
Karvel Robinson
Ashley Truss

**Minnie Hughes**
Adams, Candace
Ancrum, Antonio
Butts, Nicole
Camacho, Ricardo
Deas, Tiffany
Green, Jacque
Holmes, Kenneth
Jenkins, Ariel
McCanick, Hermeisha
Walker, Sierra

**St. James Santee**
Alston, Earl
Barr, Corbin
Bigelow, John
Etheredge, Samone
Foster, Austin
Fyar, Christopher
Gary, Cornele
Godden, Jeroy
Gray, Maimah
Manigault, Gardenia
Pitts, Carl
Richardson, Erica
Saum, Richard
Thames, Quinton

A similar group was identified from the non-participating schools. These 15 are listed below by school:

Angel Oak
Aiken, Richard
Avant, Allison
Buck, Santiago
Edwards, Amber
Fowler, Emily
Frasier, Stanley
Haynes, Carol
Maxwell, Tyeshia
Mt. Zion
Becker, Nicholas
As noted 29 were identified in the participating schools and 15 in the non-participating schools. Of these 44, only 29 are actually Cohort III, identified students in the experimental schools. The report of the Identification Committee is included in Appendix A.

The means and standard deviation on the six variables are reported in Tables 5 and 6.

Table 5. Means and Standard Deviations for Cohort III Students Identified in Participating and Non-Participating Schools on Identification Variables, 1994-95.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Identified Students Participating Schools</th>
<th>Identified Students-NonParticipating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Means</td>
</tr>
<tr>
<td>Ravens</td>
<td>29</td>
<td>102.91</td>
</tr>
<tr>
<td>TCAM-F</td>
<td>29</td>
<td>156.62</td>
</tr>
<tr>
<td>TCAM-O</td>
<td>29</td>
<td>146.96</td>
</tr>
<tr>
<td>TCAM-I</td>
<td>29</td>
<td>114.76</td>
</tr>
</tbody>
</table>
The means and standard deviations of all the students of in the kindergartens of the participating and non-participating schools for 1994-95 are in Table 6.

Table 6. Means and Standard Deviations for Students in Participating and Non-Participating Schools on Identification Variables, 1994-95.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Participating Schools</th>
<th>NonParticipating Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ravens</td>
<td>N 176</td>
<td>Means 95.03</td>
</tr>
<tr>
<td>TCAM-F</td>
<td>174</td>
<td>119.48</td>
</tr>
<tr>
<td>TCAM-O</td>
<td>174</td>
<td>115.58</td>
</tr>
<tr>
<td>TCAM-I</td>
<td>174</td>
<td>101.50</td>
</tr>
<tr>
<td>TCHASSES</td>
<td>172</td>
<td>75.41</td>
</tr>
<tr>
<td>PEERNOM</td>
<td>176</td>
<td>4.53</td>
</tr>
</tbody>
</table>

To compare the groups ANOVA was used (see Tables 7,8,9,10). There was a significant difference in favor of the comparison group on the Ravens (p<.001). There were significant differences
on each of the three TCAM subtests in favor of the experimental group (TCAM-F, p<.04; TCAM-O, p<.01; TCAM-I, p<.03).
Table 7. ANOVA for Ravens Progressive Matrices between All Students in Experimental and Comparison Groups in Kindergartens, 1994-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group (Exp/Com)</td>
<td>1</td>
<td>1667.56</td>
<td>1667.56</td>
<td>12.08***</td>
</tr>
<tr>
<td>Error</td>
<td>274</td>
<td>37809.73</td>
<td>137.99</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
<td>39477.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8. ANOVA for TCAM-F between All Students in Experimental and Comparison Groups in Kindergarten, 1994-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group (Exp/Com)</td>
<td>1</td>
<td>5164.11</td>
<td>5164.11</td>
<td>4.23*</td>
</tr>
<tr>
<td>Error</td>
<td>269</td>
<td>328688.05</td>
<td>1221.89</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>270</td>
<td>333852.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 9. ANOVA for TCAM-0 between All Students in Experimental and Comparison Groups in Kindergarten, 1994-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group (Exp/Com)</td>
<td>1</td>
<td>7218.76</td>
<td>7218.76</td>
<td>6.70**</td>
</tr>
<tr>
<td>Error</td>
<td>269</td>
<td>289707.03</td>
<td>1076.98</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>270</td>
<td>296925.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10. ANOVA for TCAM-I between All Students in Experimental and Comparison Groups in Kindergarten, 1994-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of SQ</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group (Exp/Com)</td>
<td>1</td>
<td>1337.42</td>
<td>1336.42</td>
<td>4.60*</td>
</tr>
<tr>
<td>Error</td>
<td>269</td>
<td>78218.76</td>
<td>290.78</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>270</td>
<td>79556.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p<.001  
** p<.01  
* p<.05
Further analysis by school showed significant differences by school with one of the experimental schools and one of the comparison schools having scores higher than the other three. When the students identified as potentially gifted in both the comparison and experimental schools were compared with the rest of the student bodies in kindergarten at those schools, there were significant differences on the ID measures. This is expected. The purpose of the ID procedure was to identify students who showed promise for academic success.

The identified students (44 in all, 29 from participating and 15 from non-participating) in the participating and the non-participating schools were compared on the Ravens and the TCAM subtests. There were no significant differences between them on any of the four measures (see Tables 11, 12, 13, 14). This simply established that the two groups are comparable and had there been additional years to follow these students, comparisons could reasonably have been made between them in future years.

Table 11. ANOVA between Raven Scores for Identified Students in Participating and Non-Participating Groups, Cohort III, 94-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>.97</td>
<td>.97</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>5788.13</td>
<td>137.81</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>5789.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 12. ANOVA between TCAM-F Scores for Identified Students in Participating and Non-participating Groups, Cohort III, 94-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>574.15</td>
<td>574.15</td>
<td>.42</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>56768.83</td>
<td>1351.64</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>57342.98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13. ANOVA between TCAM-O Scores for Identified Students in Participating and Non-Participating Groups, Cohort III, 94-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>1247.28</td>
<td>1247.28</td>
<td>1.47</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>35575.90</td>
<td>847.05</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>36823.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 14. ANOVA between TCAM-I Scores for Identified Students in Participating and Non-Participating Groups, Cohort III, 94-95.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>351.02</td>
<td>351.02</td>
<td>1.90</td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>7745.71</td>
<td>184.42</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>8096.73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. Statistical Data for Year III, Cohort II.

The total number of students in both participating and non-participating schools for year two was 246. Of this number 169 were from the participating schools and 77 were from nonparticipating schools. The breakdown of students (as kindergarten students in 1993-94) by schools for year was as follows:
Table 15. Number of Kindergarten Students (Cohort II) by School 1993-94.

<table>
<thead>
<tr>
<th>Students by school</th>
<th>Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating</td>
<td>169</td>
</tr>
<tr>
<td>Minnie Hughes</td>
<td>59</td>
</tr>
<tr>
<td>Frierson</td>
<td>39</td>
</tr>
<tr>
<td>St. James &amp; Santee</td>
<td>71</td>
</tr>
<tr>
<td>Non-Participating</td>
<td>77</td>
</tr>
<tr>
<td>Angel Oak</td>
<td>36</td>
</tr>
<tr>
<td>Mt. Zion</td>
<td>41</td>
</tr>
</tbody>
</table>

The breakdown by gender and race by school is in Table 16.

Table 16. Breakdown by School by Gender and Race for Kindergarten Students, 1993-94 (Cohort II).

<table>
<thead>
<tr>
<th>School</th>
<th>M</th>
<th>F</th>
<th>W</th>
<th>B</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals</td>
<td>128</td>
<td>118</td>
<td>31</td>
<td>205</td>
<td>10</td>
</tr>
<tr>
<td>Minnie Hughes</td>
<td>31</td>
<td>28</td>
<td>1</td>
<td>58</td>
<td>0</td>
</tr>
<tr>
<td>Frierson</td>
<td>17</td>
<td>22</td>
<td>1</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>St. James &amp; Santee</td>
<td>33</td>
<td>38</td>
<td>8</td>
<td>63</td>
<td>0</td>
</tr>
<tr>
<td>Angel Oak</td>
<td>24</td>
<td>12</td>
<td>13</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Mt. Zion</td>
<td>23</td>
<td>18</td>
<td>8</td>
<td>26</td>
<td>7</td>
</tr>
</tbody>
</table>
All schools have a high percentage of their student body on free lunch. Rural schools typically have high numbers since parents' income from farming, fishing, and lumber work may not be accountable in dollars. The level of income is low, nevertheless. A breakdown of the 1993-1994 kindergartners on lunch status is in Table 17. Over 75% of the students are on free lunch. Approximately 90% are on free or reduced lunch.

Table 17. Distribution of Kindergarten Students (Cohort II) by Lunch Status by School, 1993-94.

<table>
<thead>
<tr>
<th>School</th>
<th>Total 229</th>
<th>Free 179</th>
<th>Redu 29</th>
<th>Pay 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnie Hughes</td>
<td>54</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Frierson</td>
<td>31</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>St. JamesSantee</td>
<td>55</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Angel Oak</td>
<td>19</td>
<td>11</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Mt. Zion</td>
<td>20</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

The selection committee identified the potentially gifted for Cohort II. They are by school as follows:

**Participating Schools**

**Minnie Hughes Elementary School**

Bowens, Vernon

Gathers, Sha’kena
Holmes, Robert
Jenkins, Shaun
Middleton, Kendrick
Mitchell, Charles
Nesbitt, Bernard
Smalls, Anetra

Frierson Elementary School
Boston, Colin
Middleton, Jerica
Robinson, Brittany
Robinson, Jasmine
Ward, Elizabeth
White, Tiera

St. James Santee Elementary School
Bigelow, John
Eakins, Stacey
Green, Charmaine
Hutchinson, Abraham
Jackson, Roderica
Jenkins, Joe
Jenkins, Sheila
Tisdale, Templeton
White, Herman
Williams, Olivia
Non-Participating Schools

Angel Oak Elementary School

Buncum, Hope
Choice, Isiah
Dayson, Aprill
Frazier, Ty-Quawon
Hay, Katherine
Magwood, Melvin
Mazzell, Chelsea

Mt. Zion Elementary School

Austin, Harry
Frasier, Tyesha
Hill, Henry
Johnson, Latroy
Sanders, Martha
Simmons, Cedrick

In participating schools 24 students were identified; in non-participating schools 13 were identified. These 37 students represent Cohort II with only 24 of the 37 in treatment groups.

The means and standard deviations on the six variables are reported in Tables 18 and 19 for Cohort II identified students in participating and non-participating schools and for the total students, for participating and non-participating schools. Various comparisons were made between groups to see if any irregularities might affect the data.
Table 18. Means and Standard Deviations for Cohort II Students Identified in Participating and Non-Participating Schools on Identification Variables, 1993-94.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Identified Students Participating Schools</th>
<th>Identified Students-NonParticipating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Means</td>
</tr>
<tr>
<td>Ravens</td>
<td>24</td>
<td>107.74</td>
</tr>
<tr>
<td>TCAM-F</td>
<td>24</td>
<td>162.17</td>
</tr>
<tr>
<td>TCAM-O</td>
<td>24</td>
<td>160.92</td>
</tr>
<tr>
<td>TCAM-I</td>
<td>24</td>
<td>101.83</td>
</tr>
<tr>
<td>TCHASSES</td>
<td>24</td>
<td>89.46</td>
</tr>
<tr>
<td>PEERNOM</td>
<td>20</td>
<td>14.25</td>
</tr>
</tbody>
</table>

The means and standard deviations of all the students in the kindergartens of the participating and non-participating schools are in Table 19.
Table 19. Means and Standard Deviations for All Students in Participating and Non-Participating Schools on Identification Variables, 1993-94.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Participating Schools</th>
<th>NonParticipating Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Means</td>
</tr>
<tr>
<td>Ravens</td>
<td>168</td>
<td>96.41</td>
</tr>
<tr>
<td>TCAM-F</td>
<td>166</td>
<td>122.95</td>
</tr>
<tr>
<td>TCAM-O</td>
<td>166</td>
<td>121.18</td>
</tr>
<tr>
<td>TCAM-I</td>
<td>166</td>
<td>88.49</td>
</tr>
<tr>
<td>TCHASSES</td>
<td>167</td>
<td>64.43</td>
</tr>
<tr>
<td>PEERNOM</td>
<td>134</td>
<td>7.53</td>
</tr>
</tbody>
</table>

Scores on the above are available by school should those data be desired. The scores of all the kindergarten students by race is reported in Table 20.
### Table 20. Means and Standard Deviations of Kindergarten Students by Race, 1993-94.

<table>
<thead>
<tr>
<th>Measures</th>
<th>Black</th>
<th>Hispanic</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Means</td>
<td>SD</td>
</tr>
<tr>
<td>Ravens</td>
<td>201</td>
<td>96.28</td>
<td>13.86</td>
</tr>
<tr>
<td>TCAM-F</td>
<td>199</td>
<td>122.45</td>
<td>33.25</td>
</tr>
<tr>
<td>TCAM-O</td>
<td>198</td>
<td>123.35</td>
<td>36.29</td>
</tr>
<tr>
<td>TCAM-I</td>
<td>199</td>
<td>89.94</td>
<td>15.70</td>
</tr>
<tr>
<td>TCHASSES</td>
<td>179</td>
<td>64.19</td>
<td>25.37</td>
</tr>
<tr>
<td>PEERNOM</td>
<td>167</td>
<td>7.10</td>
<td>7.69</td>
</tr>
</tbody>
</table>

Since the State of South Carolina has stopped requiring achievement tests for first and second grade, these first graders in 1994-95 would have had no test scores for this year. However, the three participating schools and one of the non-participating schools are Chapter I schools; this means that the Metropolitan Achievement Test was given to the students in these four schools. The results are reported in Table 21.
Table 21. Metropolitan Achievement Test Scores for First Graders, 1994-95 (Cohort II) and CSAB Scores from Sept 1994

<table>
<thead>
<tr>
<th>Test Metro</th>
<th>Participating</th>
<th>Non-Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  Means  Std Dev</td>
<td>N  Means  Std Dev</td>
</tr>
<tr>
<td>RdCom</td>
<td>135 517.59 33.69</td>
<td>26  501.50 26.10</td>
</tr>
<tr>
<td>MathT</td>
<td>133 505.62 34.09</td>
<td>27  498.00 27.43</td>
</tr>
<tr>
<td>CSAB</td>
<td>149 88.30 13.29</td>
<td>63  92.32 14.76</td>
</tr>
</tbody>
</table>

An Analysis of Covariance was calculated for each variable, the Metropolitan Reading Comprehension Subscore and the Metropolitan Mathematics Total Subscore (Table 22, 23) with the CSAB as the covariate. There was a significant difference in favor of the participating group for the Reading Comprehension and the Mathematics comparing the total groups. When comparing the identified groups in the participating and non-participating schools, the Reading Comprehension was significantly higher for the experimental group. Since these students scores were not significantly different on the variables used in the identification process the year before when they were in kindergarten (neither total participating compared with non-participating nor identified in participating and non-participating schools), these results could suggest that the improved curriculum in the participating schools, after two years, is beginning to make a difference in the students' achievement. Reading has been a major emphasis in the revisions of curriculum. One could place more confidence in the results if the scores had been available from the other non-participating schools.
Table 22. ANCOVA for Metropolitan Achievement Test Reading Comprehension between All First Grade Students, 1994-95, in Experimental and Comparison Schools with CSAB as Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAB</td>
<td>1</td>
<td>33818.88</td>
<td>33818.18</td>
<td>42.06***</td>
</tr>
<tr>
<td>Group (Exp/Com)</td>
<td>1</td>
<td>13004.92</td>
<td>13004.92</td>
<td>16.18***</td>
</tr>
<tr>
<td>Error</td>
<td>154</td>
<td>123817.93</td>
<td>804.01</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>170641.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05  
**p<.01  
***p<.001

Table 23. ANCOVA for Metropolitan Achievement Test Total Mathematics between All First Grade Students, 1994-95, in Experimental and Comparison Schools with CSAB as Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAB</td>
<td>1</td>
<td>32343.67</td>
<td>32343.67</td>
<td>38.23***</td>
</tr>
<tr>
<td>Group (Exp/Com)</td>
<td>1</td>
<td>4513.13</td>
<td>4513.13</td>
<td>5.33*</td>
</tr>
<tr>
<td>Error</td>
<td>153</td>
<td>129450.80</td>
<td>846.08</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>155</td>
<td>166307.61</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05  
**p<.01  
***p<.001

There were significant differences between the identified students in the participating and non-participating schools on the Reading Comprehension when the CSAB was used as the covariate. The difference was not significant for the identified students on the Mathematics Total Subscore with the CSAB as the covariate. The Cognitive Skills Assessment Battery is administered to each first grader during the first six weeks of school (by his or her teacher) as required by State regulations.
See the Tables below:

Table 24. ANCOVA for Reading Comprehension Subtest of Metropolitan Achievement Test for First Grade Students in 1994-95 with CSAB as the Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAB</td>
<td>1</td>
<td>8175.36</td>
<td>8175.36</td>
<td>8.32**</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>6327.32</td>
<td>6327.32</td>
<td>6.44*</td>
</tr>
<tr>
<td>Error</td>
<td>24</td>
<td>32573.98</td>
<td>982.25</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>38076.67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05  
**p<.01

Table 25. ANCOVA for Total Mathematics Subscore of Metropolitan Achievement Test for First Grade Students in 1994-95 with CSAB as the Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSAB</td>
<td>1</td>
<td>4151.97</td>
<td>4191.97</td>
<td>6.51*</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>1281.60</td>
<td>1281.60</td>
<td>2.01</td>
</tr>
<tr>
<td>Error</td>
<td>24</td>
<td>15302.72</td>
<td>637.61</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>20736.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05

IV. Statistical data for Cohort I for Year III.

The students who were identified in the first year of the grant completed Grade 2 in this final year of the grant. Data available on these students from last year were Cognitive Skills Assessment Battery, which is individually given by the teacher to each student within the first six weeks of first grade, and the Stanford 8 Reading and Mathematics for four of the schools, Angel Oak is missing. When the SC State Department of Education cutback on state-wide testing, the Basic Skills Assessment Tests for first and second grade were dropped. All Chapter I schools
give a national standardized test to assist in the identification of students eligible for the program. The Stanford 8 was used in the three schools that were school-wide Chapter I schools. Mt. Zion was not last year, but will be this year. In addition, some of the students in both participating and non-participating schools were administered the Ravens in first grade and also took it in kindergarten the year before. These were not reported at this time; they were percentile ranks and represented only a small number. What is surprising about them is that there was a dramatic change in the scores of most of the students. This brings to question the source of such gains. Was it maturational or was it a result of the educational experience? Either way, the norms on which they are based must be questioned. Those identified in Cohort I are listed by school below:

**Cohort I**

**Participating**

**Minnie Hughes Elementary School**

Austin, Thomas
Mungin, Jeremy
Robinson II, John
Samuel, Anastashia
Sanchez, Anabel
Singleton, Jonetha

**Frierson Elementary School**

Doctor, Fatemah
Gibbs, Beatrice
Rivers, Benjamin
Russell, James

St. James Santee Elementary School

Alston, Allen
Coan, Jr., Jeffrey
Dawson, Damien
Edgerton, Corey
McGuinn, Michael
Mitchell, Jamay
Moultrie, Kafon
Sanders, Samaryer
Smith, Jarrell
Weathers, Dervontay

Non-Participating Schools

Angel Oak Elementary School

Brown, Jessie
Bullock, Oteria
Frasier, Aubrey
Garvin, Allen
Grimes, Diana
Jourdain, Joshua
Kelly, Ashley
Mikell, Tamar
Wallace, Audrey
Watson, Ricardo
Young, Dominique
Table 26. Means and Standard Deviations for Identified Cohort I Students on 1994 Stanford and CSAB.

<table>
<thead>
<tr>
<th>Measures</th>
<th>N</th>
<th>Means</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>StanRead</td>
<td>18</td>
<td>513.17</td>
<td>33.72</td>
</tr>
<tr>
<td>StanMath</td>
<td>17</td>
<td>525.65</td>
<td>32.71</td>
</tr>
<tr>
<td>CSAB</td>
<td>19</td>
<td>96.58</td>
<td>11.09</td>
</tr>
</tbody>
</table>
Table 27. Means and Standard Deviations for Non-Identified First Grade Students in the Three Participating Schools (Cohort I) 1994.

<table>
<thead>
<tr>
<th>Measures</th>
<th>N</th>
<th>Means</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>StanRead</td>
<td>131</td>
<td>514.11</td>
<td>41.41</td>
</tr>
<tr>
<td>StanMath</td>
<td>130</td>
<td>520.05</td>
<td>35.97</td>
</tr>
<tr>
<td>CSAB</td>
<td>134</td>
<td>91.48</td>
<td>15.09</td>
</tr>
</tbody>
</table>

Last year no comparisons were made between the students in participating and non-participating schools and their identified Cohort I students. A comparison was made between the above scores on students identified in the participating schools and those not identified. There were no significant differences between the scores. A glance at the two tables above shows little difference in the means of those identified and those non-identified students.

The score results for Year III are reported in tables that follow. Table 28 reports Stanford Reading and Mathematics subtest scores and Metropolitan Reading Comprehension and Mathematics scores and the CSAB scores. The Stanford 94 scores reported above and those available on 36 Mt Zion students from last year will be used as covariates in later reports of ANCOVA's.
Table 28. 1995 Achievement Test Scores, IQs and 1994 CSAB Readiness Scores for Students in the Participating Schools and the Non-Participating Schools, Cohort I (Students completed Grade Two in 1994-95).

<table>
<thead>
<tr>
<th>Test</th>
<th>Participating</th>
<th>Non-Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  Means   StdD</td>
<td>N  Means   StdD</td>
</tr>
<tr>
<td>MetRC</td>
<td>112 548.86  40.61</td>
<td>32  556.31  38.88</td>
</tr>
<tr>
<td>MetMT</td>
<td>109 536.13  35.53</td>
<td>32  542.28  28.54</td>
</tr>
<tr>
<td>StanR</td>
<td>15  556.13  35.45</td>
<td>12  576.17  40.87</td>
</tr>
<tr>
<td>StanM</td>
<td>15  547.67  32.81</td>
<td>12  550.92  26.34</td>
</tr>
<tr>
<td>CSAB</td>
<td>133 91.60   15.08</td>
<td>109 93.66   9.78</td>
</tr>
<tr>
<td>O-LIQ</td>
<td>90  85.67   11.41</td>
<td>78  87.55   13.14</td>
</tr>
</tbody>
</table>

Table 29 contains the same information for the students in the participating and non-participating schools who were identified as potentially gifted using the measures in kindergarten in 1992-93.


<table>
<thead>
<tr>
<th>Test</th>
<th>Participating</th>
<th>Non-Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  Means   StdD</td>
<td>N  Means   StdD</td>
</tr>
<tr>
<td>MetRC</td>
<td>15  547.87  39.09</td>
<td>7  566.71  25.22</td>
</tr>
<tr>
<td>MetMT</td>
<td>15  539.87  31.16</td>
<td>7  551.00  17.96</td>
</tr>
<tr>
<td>StanR</td>
<td>15  556.13  35.45</td>
<td>12  576.17  40.87</td>
</tr>
<tr>
<td>StanM</td>
<td>15  547.67  32.81</td>
<td>12  550.92  26.34</td>
</tr>
<tr>
<td>CSAB</td>
<td>19  96.58   11.09</td>
<td>17  97.47   6.88</td>
</tr>
<tr>
<td>O-LIQ</td>
<td>12  87.25   8.52</td>
<td>10  91.40   11.53</td>
</tr>
</tbody>
</table>
There were no significant differences between the Otis-Lennon (IQ) test results between students in the participating and non-participating schools. There also were no significant differences on the CSAB (1994) between the two groups.

Table 30. ANOVA between Scores on the Otis-Lennon for Students in Participating and Non-Participating Groups (2nd graders, 1994-95)

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>148.41</td>
<td>148.41</td>
<td>.99</td>
</tr>
<tr>
<td>Error</td>
<td>166</td>
<td>24881.29</td>
<td>149.89</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>167</td>
<td>25029.71</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 31. ANOVA between Scores on the CSAB for Students in Participating and Non-Participating Groups (given at the beginning of Grade 1-1994)

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>253.98</td>
<td>253.98</td>
<td>1.51</td>
</tr>
<tr>
<td>Error</td>
<td>241</td>
<td>40332.32</td>
<td>168.05</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>242</td>
<td>40586.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ANOVA Result for the Otis-Lennon and the CSAB for those identified in the participating and the non-participating schools are reported in the next two tables. Because of the small number of students with the needed scores, caution should be used in looking at these results.
Table 32. ANOVA for Otis-Lennon between Identified Students in Participating and Non-Participating Schools, 1995.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>93.94</td>
<td>93.94</td>
<td>.94</td>
</tr>
<tr>
<td>Error</td>
<td>20</td>
<td>1994.65</td>
<td>99.73</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>2088.59</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 33. ANOVA for CSAB between Identified Students in Participating and Non-Participating Schools, (administered in Fall, 1993 when they were first graders).

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>1</td>
<td>7.13</td>
<td>7.13</td>
<td>.08</td>
</tr>
<tr>
<td>Error</td>
<td>34</td>
<td>2970.87</td>
<td>87.37</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>3978.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ANCOVA's with the appropriate Stanford 94 tests as covariate, showed significant differences on the Metropolitan Reading Comprehension and Mathematics after partialing out the covariate, unfortunately in favor of the comparison group. These are shown in the tables which follow:

Table 34. ANCOVA for Metropolitan Achievement Subtest Reading Comprehension between Second Grade Students in Participating and Non-Participating Groups with Stanford Reading Administered in Spring 1994 as Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stan94 RC</td>
<td>1</td>
<td>96413.35</td>
<td>96413.35</td>
<td>106.53***</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>4870.42</td>
<td>4870.42</td>
<td>5.38*</td>
</tr>
<tr>
<td>Error</td>
<td>136</td>
<td>123083.12</td>
<td>905.02</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>138</td>
<td>224366.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 35. ANCOVA for Metropolitan Achievement Subtest Total Mathematics between Second Grade Students in Participating and Non-Participating Groups with Stanford Mathematics Administered in Spring 1994 as Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stan94 MT</td>
<td>1</td>
<td>71754.32</td>
<td>71754.32</td>
<td>121.29***</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>4528.64</td>
<td>4528.64</td>
<td>7.66**</td>
</tr>
<tr>
<td>Error</td>
<td>133</td>
<td>78678.68</td>
<td>591.57</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>154961.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One problem with this analysis is the absence of three-fourths of the students in the non-participating group (only 32 scores available out of 118). When the CSAB was used as the covariate, the differences on the Metropolitan were not significant. This was true for the total group and for the identified Cohort. Again, however, students from one non-participating school (Angel Oak) are missing from the 95 data and the 94 Stanford data. When the analyses were run for the identified students in the participating and non-participating groups, the Metropolitan Reading Comprehension and Total Mathematics were not significantly different. The Stanford 94 scores were used as the covariates. Tables 36 and 37 report these results.
Table 36. ANCOVA between Identified Students in Participating and Non-Participating Groups on the Metropolitan Reading Comprehension Subtest with the Stanford 94 Reading Comprehension as the Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stan94 RC</td>
<td>1</td>
<td>12689.84</td>
<td>12689.84</td>
<td>18.94***</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>1.12</td>
<td>1.12</td>
<td>0.00</td>
</tr>
<tr>
<td>Error</td>
<td>17</td>
<td>11387.84</td>
<td>669.87</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>24078.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 37. ANCOVA between Identified Students in Participating and Non-Participating groups on the Metropolitan Total Mathematics Score with the Stanford 94 Total Mathematics as the Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stan94 MT</td>
<td>1</td>
<td>4833.17</td>
<td>4833.17</td>
<td>13.52**</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>145.74</td>
<td>145.74</td>
<td>.41</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>5721.83</td>
<td>357.61</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>10700.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In 1995 the State Department of Education adopted the Metropolitan 7 to replace the Stanford 8 as the achievement test used in various grades for testing. None of the schools was giving the Stanford in 1994-95. The project staff tried to administer it to the students, but the logistics posed many problems. Fifteen identified students in participating schools and 12 identified in non-participating schools were administered the Stanford (see Tables below). ANCOVA's on the 95 Stanford Reading and Math with the 94 Stanford as the covariate showed no significant differences between the identified students in the participating and those identified in the non-participating
schools. This would suggest that in spite of the efforts of the teachers and the project staff, the curriculum in the participating schools has not made a measurable impact on achievement data for Cohort I.

Table 38. ANCOVA for 1995 Stanford Reading Comprehension Subtest for Identified Students in the Participating and Non-Participating Groups with the 1994 Stanford Reading Comprehension as the Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stan94 RC</td>
<td>1</td>
<td>8491.28</td>
<td>8491.28</td>
<td>14.43**</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>427.68</td>
<td>427.68</td>
<td>.73</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>9412.73</td>
<td>588.30</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>18331.68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 39. ANCOVA for 1995 Stanford Total Mathematics Subscore for Identified Students in the Participating and Non-Participanting Groups with the 1994 Stanford Total Mathematics Subscores as the Covariate.

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Sq</th>
<th>Mean Sum Sq</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stan94 MT</td>
<td>1</td>
<td>6861.01</td>
<td>6861.01</td>
<td>16.75***</td>
</tr>
<tr>
<td>Group</td>
<td>1</td>
<td>24.16</td>
<td>24.16</td>
<td>.06</td>
</tr>
<tr>
<td>Error</td>
<td>15</td>
<td>6145.10</td>
<td>409.67</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>13030.28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V. The identification procedures and results. These have been reported above and the students identified in Cohort I, Cohort II, and Cohort III for participating and for non-participating schools have been listed. As noted 20 students were identified in kindergarten in 1992-93 year as Cohort I in the three participating schools-6 from Minnie Hughes, 4 from Frierson, and
10 from Santee St. James. A comparison group in the non-participating schools was also identified - 17 students, 11 from Angel Oak and 6 from Mt. Zion. The Cohort II identified in 1993-94 consists of 24 students from the participating schools, 8 from Minnie Hughes, 6 from Frierson, and 10 from Santee St. James. From non-participating schools 13 were identified using the same criteria, 7 from Angel Oak and 6 from Mt. Zion. A Cohort III was identified during the third year of the project. From the participating schools 29 students were selected, 14 from St. James Santee, 10 from Minnie Hughes, and 5 from Frierson. From the non-participating schools, 15 were selected, 8 from Angel Oak and 7 from Mt Zion (see Appendix A).

VI. The training programs for teachers and aides. In examining the four objectives of the program, this phase of the project has also been discussed. The second and third year of the project more emphasis has been directed at changing the quality of the instructional program. Once the identification procedures were implemented in year one, the project staff recognized the need for staff development opportunities as soon as possible. Participation by the teachers during the activities in year one were not as inclusive as the staff had hoped. The efforts met with more success in years two and three (see Appendix B). The teachers have had their perspectives broadened by the visiting of other school and attending professional meetings as well as by the courses that the project staff has offered. Materials have
been obtained as requested by the teachers. During the courses and training days, the teachers have been exposed to a variety of new materials and their use. These have been made available to them. The project staff has demonstrated lessons in the teachers' classrooms as well as presented lessons during the courses and training. Bringing about instructional change is difficult and slow, but some progress has been made. The staff visits have recorded changes in room arrangement, changes in the use of materials, amount of student choice and involvement, and teacher attitudes.

One of the accomplishments of the project staff which is of particular value for future studies is the portfolio work which was done. Not only were the teachers trained in the use and development of portfolios, but the staff developed a set of criteria by which to evaluate the students' performances. The teachers' knowledge about assessment as a continuous process and the value of work samples will prepare these teachers well for the program of assessment to be initiated by the SC State Department of Education this year. The criteria deserve further study as rubrics for scoring portfolios in general. The report of the evaluation committee is appended to this report (see Appendix C).

VII. Report on support activities. The Board for the Javits Grant has been helpful in assisting in the directions to pursue and in supporting the endeavors of the staff. Dr. Jean Gubbins
from the National Research Center on Gifted and Talented made an on-site visit during year two of the grant. She visited the schools, met with staff, read reports and offered many suggestions which might increase the probability of the program being successful. The College of Charleston and the South Carolina State Department of Education personnel have also been supportive. The contributions of the Charleston County School District to making the program go have been essential. In particular, Mrs. Judith Peterson, director of gifted for the district has devoted many hours to the project.

VI. Dissemination Activities. Many of these activities have been mentioned under "spreading the word" section above. The efforts have been considerable and the project on-site director has written an article recently published in *Roeper Review*(1995), has and is presenting and national and state meetings of professional organizations, and has given guest presentations at numerous college classes and community meetings. The evaluator with the project director and on-site director proposed a paper on the project to the 11th World Conference on Gifted and Talented. It was accepted and the evaluator presented it on August 4, 1995 in Hong Kong. A list of dissemination activities during 1994-95 is given below (also see Appendix b):

**National/International:**

1. November, 1994 - Presentation at National Association for Gifted Children Annual Meeting, Salt Lake City, Utah.
2. November, 1994 - Submitted responses to survey of American Association of State Colleges and Universities Presidents' Commission on Teacher Education.


4. Sent responses to request by mail for information about the project.


6. June, 1995 - On-site project director submitted manuscript to Journal of Teacher Education.


State/Local:

1. August, 1994 - Presentation of Project SEARCH for Gifted and Talented teachers of Charleston County School District.

2. October, 1994 - Presentation of paper at South Carolina Association of Teacher Educators Annual Meeting, Charleston, SC.

3. November, 1994 - Presentation to faculty of Stella Maris School, Mt. Pleasant, SC.
4. Spring, 1994 - Presentation to graduate education class at College of Charleston, Charleston, SC.
5. June, 1995 - Presentation to teacher participants in Summer Institute for Gifted and Talented, College of Charleston, Charleston, SC.

VII. Conclusions:

It is noted that during the second year and third year of the project much was accomplished in developing a workable program of data collection, staff development, and refocus on the major goals of the program. The visit by Dr. Jean Gubbins was particularly helpful to the staff of the project.

Briefly, this report will revisit the four objectives of the project.

1. To develop a method of screening youngsters for gifted and talented at an early age using nontraditional methods. Since only Cohort I has reached the level for identification by state standards, it is difficult to evaluate the screening procedure. None of Cohort I met the state standards. If one examines the portfolio evaluations, some validity for the measures is suggested. Reliability of the subjects (kindergartners) is
always a question in making decisions at that age. Therefore, no conclusion can be drawn about whether these measures are valid for identification of gifted and talented at kindergarten. The regression results suggest the need to look further for measures that might predict future performance.

2. To develop a model program which would nurture this potentiality. The fact that two more years, at least, is needed to evaluate the impact of the program makes conclusions about the impact impossible. Only Cohort I has achievement data and it is missing from one of the comparison schools. The significant difference on Reading Comprehension and Mathematics on the Metropolitan Achievement for Cohort II in grade one may be the tip of an iceberg. However, without subsequent data on the other two Cohorts, the effectiveness is not established. It is the evaluator’s opinion that the changes that have been made and the curriculum development model as well as the teacher development program are sound and given time should make a difference. For some of the specifics of the modeling and assistance in the third year, see Appendix D.

3. To "spread the word" of good practices from the project throughout the state. This has been accomplished at the state, national, and international levels. The teacher training, the curriculum revisions, and the assessment development are worthy of dissemination.

4. To increase the number of students from under-represented populations participating in the state-funded gifted
and talented program. At this point the project has been unsuccessful in accomplishing this goal. It seems apparent that the students are enjoying a more challenging and promising curriculum, however, based on Cohort I which is the only one ready to be identified, there was no increase in the number identified.
Final Report on Identification of Targeted Students in Cohort Three
Project SEARCH
May, 1995

STEP ONE: The following instruments were used to individually assess each student in the six kindergarten classes of the project's schools. The initial assessment began in October, 1994, and all of the student data was gathered by January, 1995.

1. Ravens Coloured Progressive Matrix (Intelligence)
2. Teacher Assessment of Student's Potential (Academics)
3. Thinking Creatively in Action and Movement (Creativity)
4. Peer Nomination Interview (Social Leadership)
   (with three additional questions which were added last year.)

STEP TWO: The identification committee met on May 4, 1995, and made decisions about which students would be included in the third cohort based on the same criteria as year two. The criteria followed were

- the top 15% (approximately) of students were selected based on top rankings in at least three of the six assessments.
- students who were ranked highest in their school on the Raven's CPM. (Last year, in Cohort two, two students were included on the Raven's alone. This year, five students from participating schools were included on Raven's alone. Starred students were included on Raven's alone.)

Examination of scores was separated by school, and students were rank ordered on each assessment. A percentage of students who were the top ranked in at least three of the six areas were included in the target pool. The number of students was relative to the total number of kindergarten students in the school. Due to the inclusive nature of this project, rigid criteria were not established. Identified students are the students targeted as potentially gifted and will be followed through the project by the evaluators to determine effectiveness of identification and programming.

Students in Cohort Three targeted as potentially gifted are:

**Frierson Elementary** 5 students or 16% of total
- Jylissa Griffin
- Arielle Lafayette
- William Mack*
- Karvel Robinson
- Ashley Truss

**Minnie Hughes Elementary** 10 students or 15.6%
- Candace Adams
- Antonio Ancrum
- Nicole Butts
- Richardo Camacho
- Tiffany Deas
- Jacque Green
- Kenneth Holmes
- Ariel Jenkins*
- Hermeisha McCanick
- Sierra Walker
St. James Santee Elementary 14 students or 16.4%
Earl Alston
Corbin Barr*
John Bigelow
Samone Etheredge
Austin Foster
Christopher Fyar
Cornele Gary
Leroy Godden*
Nalmah Gray
Gardenia Manigault
Carl Pitts
Erica Richardson
Richard Saum
Quinton Thames*

Total identified: 29 students

Students identified from nonparticipating schools for the comparison to Cohort Three (1994 - 95):

Angel Oak 8 students or 14.5%
Richard Aiken
Allison Avant
Santiago Buck
Amber Edwards
Emily Fowler
Stanley Frasier
Carol Haynes*
Tyeshia Maxwell

Mt Zion 7 students or 14.89%
Nicholas Becker
Nathaniel Blake*
Aylicia Givens
Aqurra Grant
Patricia Hunter
Emerald Jenkins
Steven Parham

A total of 15 students in comparison schools were identified.
Staff Development/ Curriculum Efforts

Staff Development:
1. Four whole group meetings of Project SEARCH teachers: December, 1994; February, 1995; March, 1995; April, 1995.
3. "The Shopping Spree" - an excursion to an educational supply store where teachers purchased hands-on materials for their classes - Paid for by Charleston County School District's Gifted and Talented Program and the Chapter One Program. An application of training where teachers made decisions about which materials were appropriate for acceleration and enrichment.
5. Talents Unlimited Training, 12 hours of training, was held for project teachers who had not yet been trained in January, 1995.
6. Wright Group Science Workshop, February 1995 - all 25 project teachers attended this workshop, called "Reaching for Rainbows."
7. June, 1995 - Teacher Training Institute for Gifted and Talented - funded by SC Department of Education - This Institute included eight project teachers. Other teachers were from gifted and talented programs around the state. The Institute provided the opportunity for cross-fertilization of ideas and exposed Project SEARCH teachers to challenging curriculum developed by another Javits project, the William and Mary Curriculum.

Curriculum Efforts:
1. Main focus of curriculum/instruction efforts based on the employment of an itinerant lead teacher whose responsibilities included both the development of the model of classroom instruction and the provision for specific services at each project school site. The teacher's goal was to demonstrate eight model lessons across project classrooms during the year. End of year report discussing results from teacher's perspective will be mailed for your information.
   • Development of model included the following:
     CURRICULUM/MATERIALS
     - writing and piloting sample curriculum
     - demonstration and evaluation of commercially produced materials  i.e., simulation games

     TEACHER SERVICES
     - consulting with teachers to determine instructional materials needed to support project
     - building cohesiveness of project model through encouraging and supporting successful practices across schools and among pilot classrooms

     TEACHER PRACTICES
     - strategy demonstration, modeling, and coaching

     DATA COLLECTION
     - gathering specific portfolio items to be used in identification
     - assisting teachers in portfolio collection and assessment
     - videotaping

   • Specific services to site schools included:

     DIRECT INSTRUCTION: with accelerated resources, enabling teachers to observe
students from different vantage point

LEARNING CENTERS: development of sample learning centers

COACHING AND CONSULTING with teachers, providing teacher time to analyze and reflect on instructional practices related to desired outcomes of Project SEARCH

ACQUIRING MATERIALS

2. Ongoing site visits and group and individual interviews with Project SEARCH teachers- On site director visited schools and classrooms regularly, observing model lessons in kindergarten, first and second grades in each school. All project teachers were interviewed at regular intervals throughout the year, with the final interview being done with a questionnaire. Copies of notes are available.

Dissemination Efforts

National/International:

1. November, 1994 - Presentation at National Association for Gifted Children 1994 Annual Meeting in Salt Lake City, Utah
2. November, 1994 - Submitted responses to survey done by American Association of State Colleges and Universities Presidents' Commission on Teacher Education
3. April, 1995 - Paper presented at the Council for Exceptional Children Annual Meeting in Indianapolis, Indiana
4. Several requests through mail for information about the project (have copies of requests)
6. June, 1995 - manuscript for publication submitted to Journal of Teacher Education
7. August, 1995 - paper presented at World Conference for Gifted and Talented, Hong Kong.

State/Local:

2. October, 1994 - Presentation of paper at South Carolina Association of Teacher Educators Annual Meeting in Charleston, SC.
3. November, 1994 - presentation for faculty of Stella Maris School in Mt. Pleasant, SC.
4. Spring, 1994 - presentation for graduate education class at College of Charleston, SC.
5. June, 1995 - presentation to teacher participants in Summer Institute for Gifted and Talented at College of Charleston, SC.
6. July, 1995 - newspaper article published in the Charleston, SC Post and Courier about Project SEARCH.
7. September, 1995 - Dissemination Packet, "Promising Practices," to be mailed out to SC gifted and talented coordinators and other key educators in South Carolina.
NOTES:
- These anecdotal comments are on portfolios of targeted students only.
- Comments that are italicized are from teacher observations, not portfolio assessment.
- With students in this group who had exceptional work samples, the following generalizations apply:
  1. Drawings/illustrations and/or writing samples were elaborative, descriptive, expressive, and original.
  2. Unusual perspective was often shown.
  3. Samples showed evidence of abstract thinking.
  4. Samples showed student's understanding and interpretation of directions from teacher.
- Other exceptionalities that could not be generalized included accurate, grammatical use of language and ability to apply organizational skills. See anecdotal comments for specific, varied examples.

ANECDOOTAL COMMENTS:

Cohort One

Frierson

Fatemah Doctor
advanced and logical organization of shells in work sample - shows a systematized approach to classification
picture of box elaborate and shows a systematic approach to design
work samples included lots of pictures of people
able to support with written language pictures from magazines -- evidence of logical thinking
good self image indicated by two self portraits - anatomically correct picture
by end of 2nd grade, storied had beginning, middle and end

Beatrice Gibbs
one work sample - showed use of varied materials, with lots of detail, visual complexity,
composition of "shirt" showed original vision
other work looked unexceptional

Benjamin Rivers
evidence of good reasoning in some of his writing, logical reason given in support of his reasoning in a paragraph
work sample of "shirt" extraordinary - complex composition and use of color - advanced conception of color and obvious color scheme

James Russell
high energy, lots of vitality
work samples did not show any exceptional products

Minnie Hughes

Thomas Austin
exceptional drawing of a person - showing relative position of features - did not write about picture
prefers illustration, avoids writing
oral response about box showed imagination
Jeremy Mungin
elaborate story and writing
accurate reporting and detail in work samples, with words spelled correctly -- quite exceptional
sense of humor in writing and illustration
illustration of people - often his family - one picture shows action and movement
shows ability to think abstractly in work sample with mask

John Robinson, II
neat writing but can't be read because letter formation not recognizable

Anastasia Samuel
very popular with her classmates - verbal - persistent in things she is interested in -- does not take
direction well - works well independently - the other children look up to her
unique illustration of her collection of shells
writing shows evidence of unusual verbal ability
evidence of strong feeling in her work sample about a garden - writing and illustration show
evidence

Anabel Sanchez
moved

Jonetha Singleton
moved ?

St. James Santee

Allen Alston
exceptional artistic ability -- visual
illustrations elaborate and patterned
imaginative and unique
understands abstract symbolism
difficulty expressing through writing -- spelling poor
use of senses in describing picture - multisensory

Jeffrey Coan, Jr.
descriptive language
pictures of faces - very advanced
exceptional use of language
charming and high vitality

Damien Dawson
positive self-image indicated by his self portrait, egocentric
symbolic thinker - comprehends abstract symbols

Corey Edgerton
drawing of cards exceptional - draws people with extraordinary detail and maturity
story has beginning, middle and end - illustrations match and add to story
expressive combination of words and illustration
lots of examples of elaboration
book about pig monster - story and pictures combined again - truly exceptional use of language
and pictures to tell a story
asks probing insightful why questions on one work sample

Michael McGuinn
moved

Jamay Mitchell
work sample of box showed perspective - advanced concept for her age
Immature looking hand writing
writing imaginative but not elaborative
discrepancy between writing and drawing

Kafon Moultrie
collection illustration showed different perspectives -- different sizes and views of cards --
shown again in another illustration
exceptional example
illustrations depict action

Samaryer Sanders
elegant picture of box -- good written description
exceptional organization of collection - illustration
difficulty writing and spelling - but understood use of symbols -- showed progress by end of year
- spelling and writing improved

Jarrell Smith
moved?

Dervontay Weathers
good number story - shows logical thinking
imaginative story about box

Cohort Two
Frierson

Colin Boston
imagination, good reasoning and comparison in writing
self-reliant, at times disruptive. Highly excited when using varied materials

Jerica Middleton
abstract symbolism used in one activity

Jasmine Robinson
work shows academic inclination -- accurate, neat, orderly work which followed directions
seemed to improve with encouragement and interaction with teacher. Used books to get ideas for
drawings.

Brittany Robinson
accurate use of advanced vocabulary
abstract design in one work sample

Elizabeth Ward
shows unusual perspective in a couple of work samples -- from above
writing is well-formed, words spelled correctly, quality content with elaboration -- exceptional
writing ability
patternning evident in sample

Tiera White
moved?

Minnie Hughes

Vernon Bowens
no exceptional work samples
Sha'kena Gathers
use of abstract shapes in illustration -- more complex

Robert Holmes
good writing ability - above average
academic ability evident
abstract illustration of man

Shaun Jenkins
collage is layered and used abstract shapes to illustrate
playful illustration

Kendrick Middleton
evidence of originality

Charles Mitchell
illustration shows action and movement
nonconforming and original

Bernard Nesbitt
no exceptional samples

Anetra Smalls
details with labels

St. James Santee

John Bigelow
retained in kindergarten by parents

Stacey Eakins
originality and details in drawings and sculpture
insightful comparisons evident in sample

Charmaine Green
pattern, organized illustration of shells
strength in written expression, though not elaborative, but rather concise, coherent
descriptions, neat, interprets instructions easily.

Abraham Hutchinson
work samples looked average, with the exception that his drawings of people are above average -
the people have form and shape
he writes a great deal about his family

Roderica Jackson
moved?

Sheila Jenkins
elaborative, patterned illustrations -- descriptive writing that shows reasoning
collection picture shows organization and good use of color - elaborate
example with good composition - imaginative
sample shows movement and action - quite exceptional
story - beginning, middle, end
comparative thinking evident in sample

Joe Jenkins
drawings immature but expressive
imaginative and original
detail supports ideas in writing

Templeton Tisdale
nothing exceptional in work sample collection

Herman White
complex, meticulous construction of sculpture
elaborate writing that illustrates picture
writing shows much progress and development over time
accuracy with numbers in counting and estimation

Olivia Williams
writing showed improvement over time - from looking at journal entries
teacher's comment on folder showed that student had persistence on particular task- showed interest in working with diverse materials

Cohort Three

Frierson

Jylissa Griffin
no exceptional work
in participation, she was very exceptional

Arielle Lafayette
no exceptional work samples

William Mack
original ideas, unusual perspective in one sample
always stood out in class activities - knowledgeable, insightful responses

Karvel Robinson
elaborate designs
imaginative

Ashley Truss
exceptional writing - spelling, legible and content - reported what happened - sentences and though complete illustrations show same attention to detail

Minnie Hughes Elementary

Candace Adams
use of shapes to create picture

Antonio Ancrum
action picture using abstract shapes - exceptional
oral language written by teacher on work samples indicates verbal ability original ideas

Nicole Butts
no exceptional work samples

Richardo Camacho
exceptional use of abstract shapes to create pictures
ability to pattern
accurate prediction
ability to correctly form letters and spell words accurately
very responsive

Tiffany Deas
ability to pattern
interesting response to open-ended assignment - with details and understanding of concepts

Jacque Green
work samples not exceptional

Kenneth Holmes
animal drawings elaborate and above average
ability to pattern
use of shapes to make pictures

Ariel Jenkins
detailed drawing of collection and effort to label collection - unusual for kindergarten
extremely attentive and resourceful in answering questions during discussion

Hermeisha McCanick
elaborate picture of person - lots of detail
original use of materials in one sample

Sierra Walker
no exceptional work samples -- with the exception of oral communication written on work by teacher

St. James Santee Elementary

Earl Alston
extremely creative, sensitive, asks intelligent questions
productive -- fluent with ideas and design
designs are exceptional -- original, detailed, unusual perspective

Corbin Barr
exceptional illustrations - original
sharks tooth collection illustration good
multiple overlapping parts in collage also some movable parts

John Bigelow
advanced vocabulary, critical thinker, deductive thinker -- repeated kindergarten this year at request of parents
detailed illustration of box and collection
use of abstract shapes to create unusual pictures
clever, original, complex designs
elaborate explanations

Samone Etheredge
collage had many parts put together to make the whole -- original illustrations

Austin Foster
unusual ideas in one work sample
good participator
Christopher Fryar
elaborate illustration
unusual collection - illustration of money

Cornele Gary
lots of detail in illustrations, some originality

Leroy Godden
original
ability to pattern
unusual illustration about collection of newspapers about disasters

Naimah Gray
detail in some pictures

Gardenia Manigault
unusual pictures with abstract shapes

Carl Pitts
detailed drawing
originality
great participant in class

Erica Richardson
elaborate, abstract illustrations

Richard Saum
showed progress in writing over time
unusual, elaborate illustration
complex and abstract picture using shapes

Quinton Thames
listens well, follows direction, creative drawings
legible writing with quality content
unusual use of abstract shapes to create original pictures with elaborate writing about drawing
showed unusual perspective in two work samples
Impact:

One hundred and eighty model lessons were provided in the 26 kindergarten, 1st, and 2nd grades at Frierson, Minnie Hughes and St. James Santee Elementary schools. These model lessons explored the concepts of task commitment, patterns, individuality and creativity. Skills for critical thinking were practiced. Although these model lessons have been designed to utilize methods and materials commonly associated with curriculum for the gifted and talented, they were adapted for use in the regular classroom and within a more limited time frame. They were designed to be facilitated by the itinerant lead teacher with the active participation of the regular classroom teacher. Perhaps the most important adaptation to the regular classroom setting has been the requirement that each lesson move rapidly to a hands on participation from every child in the classroom. In keeping with this need for active participation from each student, is the research based imperative that every child in Project SEARCH produce a number of work samples to be included in portfolios for evaluation by Project SEARCH staff.

Additionally, Project SEARCH funds were used to provide each of the 26 classrooms with selected and frequently tailor made materials for learning centers. A rich variety of reading materials was provided.

Results:

The model lessons produced highly successful results in many of the Project's classrooms. The most successful of these lessons resulted in the itinerant teacher, the classroom teacher, and sometimes the teacher's assistant working in tandem to involve all students in the happy process of thinking, discovery and inventive response. In these most successful experiences, the talents of many children were explored and celebrated in the production of excellent work samples. Earlier lessons provided by the classroom teacher were discussed in the context of the model lesson and frequently teachers would continue the work begun in the model lesson setting in subsequent days. When this happened, really superior student work samples resulted and a much higher number of students were perceived as gifted in the school setting.

When the lessons were less successful, a number of factors clearly impacted. The most important factor in the success of these model lessons is the involvement of the classroom teacher. When the classroom teacher was less involved or not involved at all, the instruction or presentation stage of the lesson may have proceeded well, but when the time came for the participation of all students, the results were much less satisfactory. There appeared to be no substitute for the active participation by the teacher in supporting the children's work on their portfolios. Also, typically, it took much less time to direct children's attention during the presentation/instruction stage when the children's teacher's attention was undivided. When the classroom teacher used this stage as a time to observe her students interacting with another
instructor and seized teachable moments to integrate the material being presented with her own instructional objectives, the children were optimally involved and responsive to the model lesson material.

**Issues to be resolved:**

Very few, if any, of the lessons presented could be termed failures. The model lessons worked at the student level even when teachers were resistant. But when our objective is clearly to involve the classroom teacher in inquiry based, hands on learning, a number of lessons about resistance to change can be learned from the SEARCH experience this school year. These lessons continue to raise the following question:

*How can Project staff maximize the participation of the classroom teacher in the model lesson program with the objective of institutionalizing the concept/inquiry based and hands on method of learning?*

In searching for answers to that question it has been observed that teachers come into this project at a variety of levels of acceptance of the concept of child centered, inquiry based education. Those who are most dedicated to the teacher centered classroom model are inevitably the least open to having someone come into their classrooms and disrupt that order. Those who have already created a child centered environment are ultimately (even if not initially) the most flexible and tend to use the model as an opportunity to observe their children with the help of another instructor and to think about their own practice. This, then is a question of values and philosophy. These values and their inherent philosophies will only be changed through positive experiences with their alternatives.

*How can we get resistant teachers to experience the thrill of success with a student based lesson plan?*

Next year I plan to take an intermediate step with resistant teachers. I will engender teacher ownership in the model lessons by having them choose the subject matter through which the concepts are to be taught by me. I will provide materials to remain in classrooms to be used to continue the work begun by me. I will be available to assist the classroom teacher in implementing and facilitating these subsequent lessons.

The most successful model lessons happened when the teachers were most participatory.

*How can I recognize and reward this participation and existing level of excellence on the part of the classroom teacher?*

I will reverse the process, inviting teachers to create model lessons led by them and assisted by me. I will provide necessary research, material and preparation support. I will video tape these lessons so that the teacher will have a method of evaluating her own success and the project will have a record
Another important inhibitor in the process of making our classrooms more student centered is the teacher's fear of being reprimanded by principals and looked down upon by colleagues for classrooms that are less than quiet and frequently congested with a variety of materials and processes. The gifted and talented style classroom is invariably louder and busier. Perhaps the video taped results of best practice would be useful in exploring with these principals and faculty the advantages of student centered classrooms. The increased numbers of students identified and/or perceived and working at a more advanced level in the schools where best practice is happening will continue to provide incentive for the change resistant principal and staff.

Conclusion:

The following recommendations are made for the 1995-96 school year:

- Have the model lesson program grow to allow a choice on the part of the classroom teacher as to the subject matter to be explored by the itinerant teacher in promoting the practice of critical and creative thinking. Have the classroom teacher follow up the model lesson with subsequent lessons of her own in which she is assisted by the itinerant teacher.

- Have the practice of the itinerant teacher expand to include time spent consulting with and supporting the model lessons of the most advanced classroom teachers in the project. Have these lessons be video taped to promote evaluation and dissemination of best practice.

- Provide written guidelines for these two stages. Propose that principals meet with the itinerant teacher and the classroom teacher before the model lessons begin to choose from the above options and to set guidelines for evaluating the outcomes.

It is expected that the above recommendations will enable the itinerant teacher to tailor the services provided to the individual classroom teacher, result in the recognition of existing excellence and acknowledge each teacher's potential to practice the skills necessary to provide student centered, inquiry based classrooms.
The final report for Project SEARCH, Selection Enrichment and Acceleration of Rural Children, follows. This final report summarizes in a narrative form progress towards project goals and unanticipated outcomes. Project SEARCH, a Javits grant awarded in October 1992 to the SC Department of Education, was evaluated by an outside evaluator, and the evaluation report is included in this packet. The evaluation report contains the quantitative data related the project goals and outcomes. The final financial report has been sent under separate cover.

Goals

Project SEARCH addressed two priorities: the identification of young gifted and talented students from underrepresented populations and the development of a model providing appropriate services for young potentially gifted children. The goals established for the project were

1. the development of a non-traditional screening method for early identification;
2. the development of a model program which nurtures this potentiality;
3. the dissemination of promising practices throughout the state; and
4. ultimately, the improved identification of underrepresented students in the state's gifted and talented program.

Project SEARCH staff set out to reach these goals through collaboration with three pilot school sites in rural areas of Charleston County School District. All three schools were designated Schoolwide Chapter Schools, and all of the schools served majority African American children. The project began in Year One (1992-93) with kindergarten teachers and students in all three schools. First grade teachers and students were added in Year Two (1993-94), and second grade teachers and students were added in the final year (1994-95). By the end of the project, staff directly impacted over 450 students and 26 teachers and principals, and indirectly impacted two schools which served as control groups.

Method of Screening

The first goal required the development of a non-traditional screening method for early identification, and this goal was achieved. A method of screening was designed in Year One of the project and used at three points during the project. The following instruments were used to individually assess each student in the kindergarten classes of the project's schools.
Assessment of Cohort One began in November 1993; Cohort Two was assessed beginning in November 1994, and Cohort Three was assessed beginning in November 1995.

1. Ravens Coloured Progressive Matrix (Intelligence)
2. Teacher Assessment of Student's Potential (Academics)
3. Thinking Creatively in Action and Movement (Creativity)
4. Peer Nomination Interview (Social Leadership)

(See Appendix for more information about instruments).

An identification committee made decisions about which students would be included in each cohort based on these criteria:

- the top 10 - 15% of students based on top rankings in at least three of the six assessments.
- highest ranked students (or students who scored 90% or above) in their school on the Raven’s CPM.

Examination of scores was separated by school, and students were rank ordered on each assessment. A percentage of students who were the top ranked in at least three of the six areas were included in the target pool. The number of students was relative to the total number of kindergarten students in the school. Due to the inclusive nature of this project, rigid criteria were not established. Identified students were the students targeted as potentially gifted and were followed through the project by the project evaluator to determine effectiveness of identification and programming. More specific information is included in the Evaluation Report.

In Year Three, student portfolios were collected across project classrooms based on activities designed to elicit student products that revealed potential giftedness. Curriculum development became a support process for the identification of students. The Project SEARCH teacher developed a curriculum designed for kindergarten, first and second grade regular classrooms that had four major focuses. The focuses were based on the following characteristics of gifted and talented children:

- seeing unusual and diverse analogies and relationships
- task commitment
• celebrating unusual and diverse interests
• creativity

The curriculum design was based on the methods used to identify potentially gifted students in this population. Portfolios of work samples from learning activities done across project classes were developed and worked well in identifying the talents and exceptional abilities of the students. An assessment team used work samples from the activities done across all classes to assess the portfolios of targeted students and nontargeted students at the end of the year. Anecdotal comments on portfolios of targeted students were made and generalizations about exceptional performance of targeted students were established. With students in the targeted group who had exceptional work samples, the following generalizations apply:

1. Drawings, illustrations, and/or writing samples were elaborative, descriptive, expressive, and original.
2. Unusual perspective was often shown.
3. Samples showed evidence of abstract thinking.
4. Samples showed student's understanding and interpretation of directions from teacher.

Other exceptionalities that could not be generalized included accurate, grammatical use of language and ability to apply organizational skills.

A rubric was developed to evaluate the portfolios of student not identified as potentially gifted by the initial screening. The rubric was based on the following:

• **Originality/Imagination** Unusual, unique, evidence of going beyond that which is given, commonplace or expected.
• **Fluency** Ability to produce many ideas, examples, etc.
• **Advanced Skill Development** Shows skill beyond grade level expectations, such as showing perspective in a drawing, grammatically and structurally correct writing, correct spelling of words above level.
• **Abstract Thinking** Conceptual and/or metaphorical thinking, evidence of ability to substitute abstract symbols.
• **Elaboration/Detail** In writing and/or drawing.
The major problem encountered in using this individualized approach to identification was the labor-intensive nature of the process. Screening all students is important in finding students who are underrepresented. However, schools must recognize that it is a slow and time-consuming process to look at students individually and in different ways using multiple assessments. While it may be impractical to expect school districts to use such an individualized approach to identifying giftedness, such an approach is essential if underrepresented gifted students are to be found.

The Raven's Progressive Coloured Matrices was effective in identifying children who were unidentifiable with more traditional means. More inquiry needs to be done using portfolios as a method of screening and identification. Academic talents that were unrecognized became apparent in the work samples produced through project activities. Identification methods which are less traditional enable recognition of gifted behaviors that can then be nurtured and developed.

Model Program

The development of a model program which nurtured potentiality began in January 1993. Support processes for the inclusive classroom model involved both the curriculum development described above and teacher training. Teachers were trained in the use of strategies typically reserved for gifted and talented children, and they were provided with materials and staff support to use these strategies with all children. The strategies included higher level questioning and dialogue, open-ended and project-based assignments, the use of varied materials and hands on activities with students, and student opportunities for self-directed activity.

Key to the model program was the teacher training, which involved ongoing, sustained effort using a varied approaches. These approaches gave teachers the opportunity to learn new strategies, implement the strategies in their classrooms, reflect on their practice, and engage in dialogue with other teachers in similar settings. Approaches involved teachers in the intensive learning of summer institutes, the stimulation of attending workshops and professional meetings, ongoing conferences with a master teacher well-versed in gifted and talented methods, the benefits of networking through whole group meetings, and classroom demonstrations with
a master teacher that allowed teachers to see in practice, with their students, what they had learned about in theory. Some comments from teachers at the end of the second summer institute include the following:

"I am no longer in limbo. Now I have more tools for teaching."

"I got out of the mode of thinking of students in terms of weaknesses. Now, I am working through their strengths."

"All kids can do it--they just do it differently."

Charleston County School District’s Title I Program has recognized this model as an effective instructional approach and is funding, for the second year, a consulting teacher who models and coaches the kindergarten, first, second, and third grade teachers in project schools. This continuous consulting has reinforced the ongoing, sustained training and support for the classroom teachers and enabled teacher change. As a result of Project SEARCH, classroom teachers in the project schools have a model which supports and encourages their use of instructional methods which nurture gifted and talented, as well as other, students.

In addition to instructional support for the classroom model, project teachers received instructional materials for their students. This influx of materials helped to create a rich environment for students and encouraged teachers to involve students actively and creatively in learning. One teacher said, "My room was bare. All of these books and games came from Project SEARCH. I had no supplies. It's been very helpful in getting my classroom equipped for instruction."

When the project began in October 1992, the teachers were at different developmental levels. Project SEARCH gave the teachers the opportunity to move beyond where they were, to learn new approaches, and to experience a very different (for most of the teachers) approach to students. The results of the project varied in the classrooms, depending on the teacher and how willing and able she was to experiment and expand. Some teachers showed remarkable change during the span of the project; others showed little change. The success of the model was mixed, depending on the classroom teacher.

Dissemination

The dissemination of promising practices throughout the state and country has been
and continues to be ongoing. Project SEARCH staff has made local presentations at the College of Charleston, Charleston Southern University, for Charleston County School District's gifted and talented teachers, and for teachers in project schools. Statewide presentations have been made at meetings of the South Carolina Early Childhood Association, the South Carolina Consortium for Gifted and Talented, and the South Carolina Association of Teacher Educators. National presentation have been made at the National Association for Gifted Children and the Council for Exceptional Children. An international presentation was made at the World Conference on Gifted in Hong Kong this summer. A paper will be presented at the American Educational Researchers Association in April.

Local/state articles have appeared in the College of Charleston newspaper, the Post and Courier, and the South Carolina Consortium for Gifted and Talented's Newsletter. An article appeared in July 1995's Roeper Review (copy in Appendix). An article will appear in the winter or spring issue of the National Research Center on Gifted and Talented's newsletter.

A dissemination packet of promising practices was put together in September 1995 and mailed to gifted and talented coordinators in South Carolina. This same dissemination packet was distributed at November 1995's NAGC meeting and was circulated among the College of Charleston's School of Education. Key persons in the Charleston County School District and the SC Department of Education received copies of the dissemination packet. Finally, all teachers and principals who participated in Project SEARCH received a packet. A dissemination packet is enclosed with this report.

Identification

Ultimately, project staff hoped for the improved identification of underrepresented students in the state gifted and talented program. At the end of the project, second grade students were tested with the Otis-Lennon School Abilities Test to determine if more students were identifiable using the state criteria for gifted and talented. None of the second grade students in project schools was identified using the Otis-Lennon. This result implies that traditional approaches of aptitude and IQ tests will not increase the number of underrepresented students in gifted programs. Overall, during the three years of the project, the numbers identified as gifted and talented (in grades one through five) increased in two of the
three project schools. The following chart shows these data.

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Minnie Hughes</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Frierson</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>St. James Santee</td>
<td>9</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
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While these results cannot be tied directly to Project SEARCH, they indicate a positive trend in the pilot schools.

**Unanticipated Outcomes**

There have been several unanticipated outcomes of the project. Early in the project, the College of Charleston was included in the collaboration with the SC Department of Education and Charleston County School District (CCSD). Involvement of higher education in the project reinforced the project's research aspects. A strong and continuing partnership has been formed among the project director at the College of Charleston, the gifted and talented program of CCSD, and CCSD's Title I Program. The Title I director has paid the salary of a full time teacher to work with project schools for two years, and this year, in the absence of funding for materials and professional development, she allocated over $20,000 of Title I funds to continue the work with project schools. Four whole group meeting for teachers have been planned for the 1995-96 school year; the consulting teacher continues to model for and coach teachers in project schools; teachers in project schools are still receiving materials support. So, Project SEARCH is continuing beyond its federal funding as a viable educational model to accelerate the learning of children.

Model classrooms have been established in each project school as a way to sustain the teacher development beyond the project's funding. These model classrooms have been equipped with computers and printers purchased by CCSD's Gifted and Talented Program. The classes are rich in materials for the students' and teachers' use. The consulting teacher is using these classrooms to demonstrate model teaching that challenges all children. A result of the team approach between the classroom teacher and the consulting teacher in the model classrooms has been a business-education partnership with a local bank. Together the teachers developed
a unit about banking and economics. The unit included a field study to a local bank where students learned about the varied jobs in banking. The field study and work with students and teachers has led to a formal partnership between the bank and the model class at one of the project schools.

CCSD's Gifted and Talented Coordinator sponsored a summer enrichment program for children targeted in Project SEARCH as potentially gifted. She plans to offer the same program again in Summer 1996. Further, CCSD's Gifted and Talented Program has begun to use the Raven's Coloured Progressive Matrices in schools where students are underrepresented. Use of the Raven's has identified many more children district-wide from African American populations and English-as-second-language populations.

Federal funding paid for the first two summer institutes for Project SEARCH teachers. Project staff wrote a grant and was able to secure funding for a third summer institute in 1995. The funding allowed for the continued development of teachers' abilities to work with gifted and talented children within the classroom setting.

Finally, a partnership was developed with SC Accelerated Schools Project. This partnership resulted in a joint proposal for a Center of Excellence in Accelerating Learning. The proposal was funded by the SC Commission on Higher Education and will be built, in part, on lessons learned from Project SEARCH.

**Recommendations for Practice: Lessons Learned**

The project's priorities were identification of underrepresented gifted students and the development of a model to nurture those students' abilities. Lessons were learned from successes as well as failures. Clearly, identifying academic potential early is difficult and must be ongoing, using multiple assessments. There is no substitute for personal, one-on-one screening. Continued exploration of effective ways to identify children early is essential if we are to reach children before they "drop out intellectually."

While it is clear that we must take nontraditional approaches to uncovering children's gifts, it is equally essential to take nontraditional approaches to nurturing those gifts. The deficit approach to teaching children is not effective. In order to turn students' strengths into academic talent, the use of gifted and talented methods and curricula with all children offers the frame for a paradigm shift for teachers. This paradigm shift needs to include a broadened conception of giftedness which moves away from a strictly aptitude, IQ view of giftedness, to a view of giftedness in many forms. This shift will lead to increased challenge of gifted and talented children in the regular classroom setting.
Strong teacher training and development is key in any improvement or change. Using professional development in a sustained way to build the capacity of the classroom teacher will strengthen the rigor and challenge in the classroom for all students. Teachers have taken many education courses, have participated in numerous workshops and seminars, but they often fall back on instructional habits that they have used for years, those habits that feel most comfortable, least risky. A supportive environment that encourages innovative instruction is key. Fear of failure is an obstacle for teachers’ experimentation with innovative instruction. Strong support must be in place if the teacher is to step into "uncomfortable territory" of new and innovative teaching strategies.

Project SEARCH has enjoyed some successes as well as some failures. Any project which works within the school setting to effect change will have mixed results. The institutionalization of segments of Project SEARCH by CCSD allows for continued impact on students and teachers. Project SEARCH’s lessons have sparked other investigations and activities which extend well beyond the life of the project’s federal funding.
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