This document examines whether early targeted academic intervention can improve college admission test scores and pre-college planning for students identified through the Duke Talent Search and the school system Challenge Program. Students selected for the Early Awareness Test Preparation Pilot Program were invited to participate during their eighth grade year and a 4-year commitment to the program was requested. Through the pilot program, students annually attended a series of classes in Math, English, and test taking skills. Preliminary results indicated that the program assisted a majority of students in gaining an opportunity to increase test scores. Both the lack of an exit summary and the size of the pilot program were drawbacks to the study. Approximately half of the students were unable to attend the last testing. It is hoped that upon completion of the 4-year pilot, results from the first year can be assessed in comparison to the total remaining student population. This could provide a clearer picture of what can be accomplished through the utilization of the program. (Contains 13 references.) (JDM)
Early Awareness Test Preparation Pilot Program
Mary-Beth Muskin, Creighton University
Sharon Cipperley Friedlander, Omaha Public Schools
Abstract

This article examines whether early targeted academic intervention can improve college admission test scores and pre-college planning for students identified through Duke Talent Search and the school system Challenge Program. Students selected to participate in the Early Awareness Test Preparation Pilot Program were invited to participate during their eighth grade year and a four year commitment to the program was requested from each student. Through the pilot program students attended a series of classes annually that addressed instruction in the areas of math, English and test taking skills.
Early Awareness Test Preparation Pilot Program

The Early Awareness Test Preparation Pilot Program was designed as a self-supporting program to establish if early academic intervention (starting in grade 8) would enhance ACT/SAT I test scores. The Early Awareness Test Preparation Pilot Program was designed for the purpose of improving college admission test scores and pre-college planning. The acceptance of SAT I results as the leading indicator of one’s overall ability and worth is contrary to College Board and testing services guidelines, but, unfortunately, states and individual schools find themselves ranked and rated according to their student SAT scores (Wiggins, 1992).

The Early Awareness Test Preparation proposal was developed in support of the district’s Annual Plan. Additionally, it addressed voiced concerns of some parents about the inability of their children (students ranking in the top 24%) to get into their first university of choice. Upon review of the situation with university personnel on an informal basis, ACT/ scores were cited as the main single denominator for this segment of bright student’s denial of admission. The Early Awareness Test Preparation Pilot Program proposed this study to evaluate whether there is an impact on test scores for this population of students, if they have the opportunity to work on test taking skills. Research is mixed on whether coaching for the test improves student scores. “The has ETS abandoned its original opposition to coaching (Ornstein 1993). However, there are indications that the additional work would, increase top student’s chances of admission to their colleges of choice.
An extensive review of the literature revealed that there has been only one such attempt in the past. In 1984 the State of Louisiana ranked next to the bottom of all states in a Department of Education report on national ACT and SAT scores (Chaika 1985). The state’s response was to devise a course to teach SAT test-taking skills to junior high students to see if gifted seventh graders taking the Duke Talent Search would score higher on the SAT than did the previous class that had not taken the course.

The study was small, and focused on seventh grade students. Preliminary results indicated that students who regularly attended classes increased their scores thus qualifying for the Duke Talent Search Program (Chaika, 1985).

Additional research by Carris (1995) states that if students are offered a test-prep program, it should be a quality program offered early in their academic careers. Her recommendations indicate a preference for starting at kindergarten and infusing test preparation into the curriculum on a daily basis.

The overall goal of the Early Awareness Test Preparation Pilot Program was to assess whether early, ongoing intervention can have an effect on increasing test scores. Peltier (December 1989) points out that theoretically there are three ways to improve test scores:

- genuine improvements in the abilities measured by the test
- decreased anxiety, increased familiarity with the format
- heightened test-taking skills
Peltiers (December 1989) three points are programmatically addressed in the Early Awareness Test Preparation Pilot Program. Additionally, the weight of the evidence clearly indicates that improving one’s score by study and effort is not only possible but also probable. (Peltier, 1989).

Method

Participants

The target population included students who had been selected through the Duke Talent Search Program to take the ACT or SAT I as seventh graders and who had completed the tests. Student selection was based on the ACT/SAT I scores of students that participated in the Duke Talent Search program achieving state recognition. Additionally, students who successfully completed the SOI (district administered intelligence test) and had been recommended through the district challenge program also were invited to participate. Initially, a total of 90 students were invited to participate in the program. Of the total number of invited participants, 38 enrolled in the program during the first year. The enrolled student population was comprised of 30 students from the Duke Talent Search Program and an additional 8 who were identified through the SOI and challenge teacher recommendation. Students participating in the Early Awareness Test Preparation Pilot Program were identified from seven middle schools which represented a cross-section of students from this mid-size city. Minorities comprised 13% of the total participating student population.
Program Components

The Early Awareness Test Preparation Pilot Program was presented to parents and students as a four-year commitment both on the part of the school district and the students. The program effectiveness was evaluated annually with a comprehensive evaluation at the end of the four-year commitment. Program start-up funds were procured through the acquisition of a local grant.

The curriculum for the program was created using a developmental model. The focus was on skill building in the content areas with a section on general test taking and critical thinking skills included. Prior to the start of the program, a parent meeting was held to assist parents in understanding annual goals and to actively involve them in the process. During the eighth grade year, classes focused on the sections found on the ACT/SAT I. These sections included grammar, rhetoric, reading and math concepts. Specialists in each field were contracted to teach the section falling within their expertise. Instructors who were selected for the program were told that they were to develop the curriculum for each year of instruction and that lessons should be based on program goals which were tied to the desire to assess whether this early intervention could boost student scores.
on the ACT/SAT 1. A study indicated that there were positive gains when there was an application of game playing strategies with high school seniors who were taking a test-taking course (Wiggins, 1992). A goal of the pilot program was for instructors to make lessons meaningful yet fun. Classes ran from October 1997 through May of 1998. During the designated week of class, three classes were offered for a total of five sessions for each set of class sessions. All students participating in the program received a total of ten hours of instruction. Pre- and post-tests taken were given to assess student progress over the year and to evaluate areas of strength and weaknesses. Additionally, a survey was administered to parents and students which requested their input on program strengths and weaknesses. Results from the surveys were used to determine what program changes were needed for the following year.

A meeting was held for parents of students participating during the ninth grade year. Ninth grade classes focused on review of skills learned relative to test items from the post-test and incorporated test taking skills. Classes were conducted from October 1998 through April 1999. However, based on input from parents the location was changed to a centrally located university. This was beneficial because of the centrality of the location as well as the student’s exposure to a University setting.

The plan for years three and four followed a similar format. However, the plan required that students be assessed annually to determine course need. Additionally, in year three, the sophomore students take the PLAN test and in the fourth year of the course students take the PSAT in the fall and the ACT/SAT 1 in the spring.
The PLAN and PSAT will assist with diagnosis of strengths and weaknesses of students and provide predictor score.

Results

Upon completion of the second year of the Early Awareness Test Preparation Pilot Program, results for the ninth grade students who remained in the program were positive. Thirty-eight students participated in the program during year one and twenty-eight participated during year two. Regular class attendance was strong throughout both years. However, on the last scheduled class for year one a total of fifteen completed the post-test due to a district overlap in scheduling of events. This unfortunate situation allowed for only the total of fifteen student results to be complete in terms of pre- and post-testing over the two-year period for comparison purposes.

The mean score in the verbal area in the fall of 1997 was 61.1. The mean score in the verbal area in the spring of 1998 was 66 and the mean score in the fall of 1999 was 74. Twelve students increased their scores by an average of 19 percentage points. One student dropped by one percentage point and the other two went down an average of 11 percentage points.

The mean score in the area of math in the fall of 1997 was 52, 59 in the spring of 1998, and 85 in the spring of 1999. Individually all student scores increased with the group average being 15%.

In the area of writing skills, students had a mean of 51 in the fall of 1997, but in the spring of 1998, the mean went down to 46. However, in the spring of 1999, the student
mean increased to 62. Thirteen of the fifteen students achieved an average gain of 15% in their scores, while two students had an average decrease of 7.5%.

**Parent/Student Survey (1997-1998)**

Parents and students were surveyed using a question format that provided space for comments. Twenty-nine parents and students completed the survey during the first year of the pilot program. Results from the surveyed were reviewed with program administrators looking for trends in responses. Where concerns were repeated program changes were made. Questions from the parent survey along with total responses can be reviewed in Appendix A.

---

**Appendix A**

The comment section revealed student thoughts in a very candid manner. Comments included “teachers made the session,” “sometimes I thought hard about what we were talking about,” “classes were fun and I met kids from all over the city.” Comments in conjunction with yes no responses indicated that some change was necessary in the verbal area. Student statements included “the math was challenging but the verbal went too fast,” and “I don’t understand language to well and the instructor expected me to know what I was doing.” Scheduling and location changes were made for the second year. These changes were based on parent and student statements like, “it’s close to me but could we have it somewhere else next year,” “the time was too late,” and “sometimes class conflicted with other activities.”

The year two surveys were developed with the intent of gaining more specific program data. This survey was developed using a Likkert scale that went from A) strongly disagree to E) strongly agree. The first page was divided by class topics including general strategies, math and verbal. The statements in each section included:

- I attended the (general strategies, math and verbal) portion of the test preparation program.
- The instructor knew the subject well.
- The instruction will help me prepare for the PSAT/SAT/ACT.
- The instruction time was too short.
- The instruction time was too long.

The second half of the instrument was fill-in the blank. Questions in this section included:

- Name one thing that you learned that will help you with the verbal portion of the test.
- Name one thing that you learned that will help you with the math section of the test.
- Name one thing that you learned that will help you on the general test taking/critical thinking skills required for the test.

The data indicated that overall students and parents were happy with the program and the location and that changes made in teaching staff were viewed as positive. Informal discussion with students that chose not to return indicated that two students had moved and that the rest found it hard to continue because of increased school loads and other desired activities.
Discussion

Preliminary results indicate that the Early Awareness Test Preparation Pilot Program assisted a majority of the students completing pre and post testing in gaining an opportunity to increase test scores. The other major contributing factor to success included the completion of another school year, which provided some natural growth.

Major drawbacks to this study included the lack of an exit summary and the size of the pilot population. There are a significant number of other school activities that create conflicts for students participating in this program. Since this is a district-wide program and the scheduling of individual schools varies significantly, there is additional difficulty created in finding a time that is good for all students. Approximately half the students enrolled and participating in the program were unable to attend the last class (testing) during the second year of the pilot, results at this mid-point were based on the performance of only fifteen of the remaining twenty-nine students. It is hoped, however, that upon completion of the four-year pilot, results from the first year can be assessed in comparison to the total remaining student population. Assessment of the total student population enrolled in the pilot program would provide a clearer picture of what can be accomplished through the utilization of an Early Awareness Test Prep Pilot Program.
References

Bakunas, B. (September 1993). Putting the lid on test anxiety. Learning, 22, (2).


Table 1  
Racial Composition  

<table>
<thead>
<tr>
<th>Race</th>
<th>Raw Number</th>
<th>Percent of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>25</td>
<td>64</td>
</tr>
<tr>
<td>African-American</td>
<td>8</td>
<td>20.5</td>
</tr>
<tr>
<td>Native American</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Asian</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>TOTAL</td>
<td>38</td>
<td>100</td>
</tr>
</tbody>
</table>
Appendix A

Parent Survey and Results

1. Do you feel intellectually challenged by classes?

Twenty-nine students responded that they were intellectually challenged.

2. Did you like going to class?

Twenty-five students responded that they did like going to class, while three students said they did not.

3. Did you learn new information at the Test Prep class?

Twenty-nine students responded positively.

4. Did you feel that the instructors teaching styles met your needs?

Relative to verbal instruction, nineteen students indicated satisfaction with the instructor and ten students were unhappy with the instructor. Relative to math instruction, twenty-eight students were satisfied with the instructor while one was not.

5. Was the schedule flexible enough for your family?

Twenty-seven students thought that the schedule was flexible enough while two were unhappy with the schedule.

6. Is the present location the best site for a citywide program?

Twenty-five students liked the location while four did not.
REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

<table>
<thead>
<tr>
<th>Title</th>
<th>Early Awareness Test Preparation Pilot Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Mary Beth Mustin, Ph.D., NCC, Sharon Copper ley-Friedlander</td>
</tr>
<tr>
<td>Corporate Source</td>
<td></td>
</tr>
<tr>
<td>Publication Date</td>
<td></td>
</tr>
</tbody>
</table>

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

1. **Level 1**
   - PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
   - TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A. **Level 2A**
   - PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY
   - TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B. **Level 2B**
   - PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
   - TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: [Signature]
Printed Name/Position/Title: [Printed Name/Position/Title]
Organization/Address: [Organization/Address]
Telephone: [Telephone]
FAX: [FAX]
E-Mail Address: [E-Mail Address]
Date: [Date]