# MEMORANDUM 

To: Eric Witherspoon, Superintendent
From: Judith Levinson, Director Research, Evaluation and Assessment Marilyn Madden, Assistant Superintendent/Principal

Date: February 8, 2007
Subject: Final Report on the 2005-06 Test Prep Course

## Background

In 2005-06 the Student Services Department implemented a Test Preparation program in conjunction with Kaplan Learning Systems. The program was aimed at students in regular level classes who at the end of 3 semesters had a grade point average of a 2.0 and PLAN sub-test scores between a 13-16. Based on their PLAN scores, these students were not "on track" to meet/exceed standards on the PSAE. A total of 73 students were enrolled in the program. Six students dropped the Test Prep course prior to the start of the course due to parent request or leaving the district. The Test Preparation course addressed:

Goal 1: Student Achievement and Performance - Improve student achievement, particularly for students who are not yet meeting standards.

## Strategies:

- Design and conduct test preparation for PSAE (ACT and WorkKeys) for students who are not "on track" to meet or exceed standards based on an analysis of test results and other academic indicators.
- Provide a second semester test prep class for juniors not "on track" to meet standards
- Teachers in all departments will incorporate test preparation lessons into classes for juniors


## Anticipated Outcomes:

- Improve the PSAE/ACT performance of students in Test Prep program so that 50\% of the students exceed predicted outcome based on PLAN scores.

In June 2006 we presented a preliminary report on the performance of students who were enrolled in the newly implemented Test Prep course. The report provided data on the performance of students on the ACT portion of the Prairie State Achievement Examination (PSAE). The total PSAE score for reading and math is a combination of the results of the ACT and WorkKeys tests. The report indicated that a little over 60 percent of students improved their score by 2 or more points in reading and math from the PLAN test taken in 2004 to the ACT taken in spring of 2006. The report also indicated that Black and White students showed greater gains than the typical gain in reading and math shown by ETHS Black and White students, respectively. The report did not provide data on students' performance on the PSAE as a whole because PSAE scores were not yet available in June.

## Performance of Test Prep Students on PSAE

Although the district still does not have final PSAE scores, this document provides an analysis of preliminary PSAE data. These data do not include four students and do not account for corrections that the state is currently doing to finalize scores. As a district, we moved ahead to try to analyze this small set of data because we wanted to provide information and feedback to the staff members who will be teaching the Test Prep course this semester. We felt this information would be valuable in providing direction for improving student performance this year.
Table 1a shows the percent of students who fell into each of the performance levels on the PSAE on the math exam. Performance levels are Academic Warning, Below Standards, Meets Standards, and Exceeds Standards. Overall, 58 percent of students met standards on the PSAE. For Black students, 58 percent of students met standards. For White students, 69 percent of students met standards. A smaller percentage of Hispanic students met standards in math on the PSAE. The numbers of other subgroups were too small for reliably reporting the results. Table 1b shows the same information for the reading portion of the PSAE. While 75 percent of White students and 50 percent of Hispanic students met standards in reading, only 36 percent of Black students did so.

Table 1a. PSAE Combined Math Performance Level by Ethnicity

|  | Academic <br> Warning | Below <br> Standards | Meets <br> Standards | Exceeds <br> Standards | N/A |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Black | 1 | 13 | 21 | 0 | 1 |
| Hispanic | $2.8 \%$ | $36.1 \%$ | $58.3 \%$ | $0 \%$ | $2.8 \%$ |
| White | 1 | 3 | 3 | 0 | 1 |
|  | $12.5 \%$ | $37.5 \%$ | $37.5 \%$ | $0 \%$ | $12.5 \%$ |
| Total | 0 | 5 | 11 | 0 | 0 |
|  | $0 \%$ | $31.3 \%$ | $68.8 \%$ | $0 \%$ | $0 \%$ |

( $\mathrm{n}=64$ )

Table 1b. PSAE Combined Reading Performance Level by Ethnicity

|  | Academic <br> Warning | Below <br> Standards | Meets <br> Standards | Exceeds <br> Standards | N/A |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Black | 2 | 20 | 13 | 0 | 1 |
| Hispanic | $5.6 \%$ | $55.6 \%$ | $36.1 \%$ | $0 \%$ | $2.8 \%$ |
| White | 2 | 1 | 4 | 0 | 1 |
|  | 0 | $12.5 \%$ | $50.0 \%$ | $0 \%$ | $12.5 \%$ |
| Total | $0 \%$ | 4 | 12 | 0 | 0 |
|  | 5 | $25.0 \%$ | $75.0 \%$ | $0 \%$ | $0 \%$ |

( $\mathrm{n}=64$ )
Additional analyses were conducted to identify the number of students who came close to passing the PSAE. The scale range for the PSAE is 120 to 200. Passing is 155 for reading and 156 for math. Tables 2a and 2 b indicate that 8 students (or $35 \%$ of the students below standards) in math and 9 students (or $33 \%$ of the students below standards) in reading were within 5 points of passing the PSAE. Information we have received in special PSAE workshops has taught us that depending on the test, even one or two additional items correct on the ACT and/or WorkKeys could result in a passing PSAE score.

Table 2a. Scale Scores of Students with a Combined PSAE Math Performance Level Below Standards

| Scale Score | No. of Students | \% of Students |
| :--- | :---: | :---: |
| 155 | 3 | $13.0 \%$ |
| 154 | 0 | $0 \%$ |
| 153 | 2 | $8.7 \%$ |
| 152 | 2 | $8.7 \%$ |
| 151 | 1 | $4.3 \%$ |
| 150 | 3 | $13.0 \%$ |
| $145-149$ | 8 | $34.8 \%$ |
| $140-144$ | 4 | $17.4 \%$ |
| Below 140 | 0 | $0 \%$ |
| Total | 23 | $99.9 \%$ |

Note: scale score of $156=$ meets standards
Table 2b. Scale Scores of Students with a Combined PSAE Reading Performance Level Below Standards

| Scale Score | No. of Students | \% of Students |
| :--- | :---: | :---: |
| 154 | 1 | $3.8 \%$ |
| 153 | 1 | $3.8 \%$ |
| 152 | 5 | $19.2 \%$ |
| 151 | 1 | $3.8 \%$ |
| 150 | 1 | $3.8 \%$ |
| $145-149$ | 7 | $27.0 \%$ |
| $140-144$ | 4 | $15.4 \%$ |
| Below 140 | 6 | $23.1 \%$ |
| Total | 26 | $99.9 \%$ |

Note: scale score of 155 = meets standards
Table 3 shows the percent of students with a PSAE score below standards compared to those who met standards with respect to test score gains from PLAN (04) to PSAE (06) in reading and math. It can be seen that although 26 students did not meet standards in reading, 48 percent of them improved their scale score from PLAN to ACT by 2 or more points. Furthermore, 24 percent of these students improved by 4 to 7 points. Similarly, while 23 students did not make standards in math, 31 percent of them improved their score by 2 or more points, and 13 percent improved by 4 to 6 points.

Table 3. Percent of Students with a PSAE Performance Level of Below Standards or Meets Standards by Test Score Gains from PLAN (04) to PSAE/ACT (06)

|  | n | \% 2 <br> pts. or <br> more | 0 pts. <br> or a <br> loss | 1 pt. | 2 pts. | 3 pts. | 4 pts. | 5 pts. | 6 pts. | 7 pts. | $\mathbf{8}$ pts. <br> or <br> more |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Reading | 64 | $62 \%$ | $28 \%$ | $11 \%$ | $11 \%$ | $5 \%$ | $9 \%$ | $5 \%$ | $5 \%$ | $11 \%$ | $16 \%$ |
| Below | 26 | $48 \%$ | $42 \%$ | $12 \%$ | $12 \%$ | $12 \%$ | $8 \%$ | $0 \%$ | $4 \%$ | $12 \%$ | $0 \%$ |
| Meets | 31 | $84 \%$ | $3 \%$ | $13 \%$ | $13 \%$ | $0 \%$ | $10 \%$ | $10 \%$ | $6 \%$ | $13 \%$ | $32 \%$ |
| Math | 64 | $63 \%$ | $30 \%$ | $8 \%$ | $9 \%$ | $11 \%$ | $16 \%$ | $6 \%$ | $5 \%$ | $5 \%$ | $11 \%$ |
| Below | 23 | $31 \%$ | $52 \%$ | $17 \%$ | $9 \%$ | $9 \%$ | $9 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ |
| Meets | 37 | $84 \%$ | $14 \%$ | $3 \%$ | $8 \%$ | $11 \%$ | $22 \%$ | $11 \%$ | $5 \%$ | $8 \%$ | $19 \%$ |

Finally, tables 4a and 4b provide more detailed test information for the students who had PSAE scores below standards. The tables show both the ACT score and WorkKeys score for each PSAE score in reading or math. The scale for ACT scores ranges from 1 to 36 . The scale for WorkKeys scores ranges from 3 to 7 . Each ACT score or WorkKeys score relates directly to the number of items that students got correct. These tables reveal the different score combinations that can occur and their relationship to the total PSAE score. Typically, students pass if they receive a 19 on the ACT and a 5 on the WorkKeys. However, table 4 a shows one student (PSAE score of 151) who had an ACT math score of 20 and but did not pass the PSAE because of his WorkKeys score of 4 . In another case, table 4b shows a student with a PSAE score of 154 (very close to the passing score of 156 ). Although this student's ACT reading score was only 13 , the student must have had a very high " 5 " WorkKeys math score.

Table 4a. Students with a PSAE Math Performance Level of Below Standards - PSAE/ACT Score versus WorkKeys Score

| Combined Math Scale Score | ACT Math Score | WorkKeys Math <br> Score |
| :---: | :---: | :---: |
| 155 | 18 | 5 |
| 155 | 17 | 5 |
| 155 | 17 | 5 |
| 153 | 19 | 4 |
| 153 | 18 | 5 |
| 152 | 19 | 4 |
| 152 | 18 | 4 |
| 151 | 20 | 3 |
| 150 | 16 | 5 |
| 150 | 16 | 5 |
| 150 | 15 | 5 |
| 148 | 17 | 4 |
| 148 | 16 | 4 |
| 147 | 18 | 3 |
| 147 | 15 | 4 |
| 147 | 15 | 4 |
| 146 | 16 | 4 |
| 146 | 15 | 4 |
| 146 | 15 | 4 |
| 144 | 15 | 4 |
| 143 | 16 | 3 |
| 140 | 16 | 3 |
| 140 | 15 | 3 |
|  |  |  |

Table 4b. Students with a PSAE Reading Performance Level of Below Standards - PSAE/ACT Score versus WorkKeys Score

| Combined Reading Scale <br> Score | ACT Reading <br> Score | WorkKeys Reading <br> Score |
| :---: | :---: | :---: |
| 154 | 13 | 5 |
| 153 | 15 | 5 |
| 152 | 19 | 4 |
| 152 | 18 | 4 |
| 152 | 18 | 4 |
| 152 | 18 | 4 |
| 152 | 18 | 4 |
| 151 | 18 | 4 |
| 150 | 18 | 4 |
| 149 | 18 | 4 |
| 149 | 17 | 4 |
| 147 | 17 | 4 |
| 147 | 15 | 4 |
| 147 | 15 | 4 |
| 147 | 13 | 4 |
| 146 | 16 | 4 |
| 144 | 18 | 3 |
| 143 | 15 | 4 |
| 143 | 14 | 4 |
| 143 | 12 | 4 |
| 139 | 14 | 3 |
| 139 | 13 | 4 |
| 138 | 13 | 3 |
| 138 | 13 | 3 |
| 138 | 12 | 4 |
| 137 | 13 | 3 |
|  |  |  |

## Implications

The Test Prep course clearly had an impact on students' ACT scores. Overall, 60 percent or more of students gained two or more points. This gain was particularly noteworthy for Black students where on average, the gain in past years has been a little over one point from PLAN to ACT. Although students improved their ACT score, a number of students still did not meet standards on the PSAE. This analysis suggests that both the ACT and WorkKeys scores are important for students passing the PSAE. Last year, the Test Prep course provided test prep work that focused on the ACT. It is clear that students need work both on the ACT and WorkKeys. This year, students will be receiving direct instruction on both these tests.

