

**Students' Curricular
Paths and GPAs:
The Relationship with
ACT Scores**

Agenda

- ◉ Introductions/Welcome
- ◉ Ice Breaker: Reflection Walk
- ◉ Student Profile Group Discussion
- ◉ Student's Curricular Paths and GPA's:
The Relationship with ACT Scores
- ◉ ACT Scores in 2016
- ◉ Questions

Reflection Walk

- ◉ **Green Dot-** My school has adopted this practice and it is effective.
- ◉ **Yellow Dot-** My school has this practice but it is not as effective as it could be.
- ◉ **Red Dot-** My school does not have this practice in place.
- ◉ **Does your school have a program in place to help you raise your ACT score?**

Student Profile Discussion

- What may have influenced your performance on the ACT?

Purpose of the Study

- Determine the differences in ACT scores on the subtests of math, English, reading, and science between students enrolled in different curricular paths (AP or regular)
- Determine whether the differences in ACT scores on the subtests of math, English, reading, and science between students enrolled in different curricular paths (AP or regular) were affected by the student demographic variables of gender, race, and SES
- Determine if there was a relationship between students' ACT composite scores and their GPAs
- Determine whether the relationship between students' ACT composite scores and their GPAs was affected by the student demographic variables of gender, race, and SES

Curricular Path

- ◎ **Advanced Placement (AP) path.** Students were considered in the AP path if they were enrolled in one or more of the following courses offered in Sunflower Public School District: AP English Composition and Language , AP English Literature and Composition, AP Biology, AP Chemistry, AP Environmental Science, and AP Physics, AP Calculus AB, AP Calculus BC, and AP Statistics
- ◎ **Regular path.** Any course that is not designated as Advanced Placement is considered a regular path course.

Major Findings

- Students who enrolled in at least one math, English, or science AP course performed better on the ACT math, English, reading, or science subtests respectively than students who enrolled in regular courses.
- The demographics did not affect differences for math, English, and reading, but race had an effect on the difference for science. Minority students who enrolled in at least one AP science course performed better on the ACT science subtest than did minority students who enrolled in the regular science courses.

Major Findings

- Students with higher GPAs tended to have higher composite scores and students with lower GPAs tended to have lower ACT composite scores
- The relationship between GPAs and ACT composites scores was stronger for female students than for male students
- The relationship between GPAs and ACT composite scores was stronger for minority than it was for non-minority students
- The relationship between GPAs and ACT composites scores for full pay lunch students was not different from the relationship between GPAs and ACT composites scores for reduced lunch students

Implications for Action

- ◉ Minority students do not enrolled in AP courses at the same rate of non-minority students
- ◉ Significant differences in ACT science subtest scores between minority students enrolled in AP courses and minority students enrolled in regular courses were found
- ◉ Being enrolled in AP courses benefits students and helps prepare them for the ACT

Implications for Action

- Evaluate the consistency across the district related to availability of ACT prep courses
- Implementation of ACT strategies in elementary and middle schools within the curriculum
- Providing training to all teachers, not just AP teachers, about best practice or strategies that are used in AP courses and make them building wide

ACT Scores Average By Race and Ethnicity, 2016

| Group | English | Math | Reading | Science | Composite |
|-----------------|---------|------|---------|---------|-----------|
| Black | 15.8 | 17 | 17.4 | 17.2 | 17 |
| Native American | 16.3 | 17.7 | 18.2 | 18.1 | 17.7 |
| White | 21.9 | 21.7 | 22.8 | 22.1 | 22.2 |
| Latino | 23.3 | 25 | 23.7 | 23.6 | 24 |
| Asian | 17.4 | 18.9 | 18.9 | 18.6 | 18.6 |
| Two or More | 20.4 | 20.5 | 21.6 | 20.9 | 21.0 |
| No response | 19.3 | 20.0 | 20.6 | 20 | 20.1 |

Note: Adapted from Inside Higher Ed retrieved on October 12, 2016 from https://www.insidehighered.com/news/2016/08/24/average-act-scores-drop-more-people-take-test?utm_source=Inside+Higher+Ed&utm_campaign=3a84d7caf5-DNU20160824&utm_medium=email&utm_term=0_1fcbc04421-3a84d7caf5-197593613&mc_cid=3a84d7caf5&mc_eid=b6245f559a

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