Abstract

Many studies show a positive correlation between ACT scores and level of family income. In the Oklahoma City Public School district, for instance, students from low-income families tend to have lower scores than students from average income families. In 2014, students from Douglass Mid-High School, which is based in a historically lowincome area of Oklahoma City, scored 3 points lower than the district's average. To combat this problem, the CCA Urban ACT Prep Program was formed in 2015. The project seeks to prepare prospective college students for the mathematics portion of the ACT exam by providing tutoring sessions tailored to meet college readiness standards. In this poster, we present a preliminary report based on a semester of work with the students.

The Effects of Poverty on **Educational Outlook**

The link between income and educational attainment has been studied extensively. In some sense it has a cyclical nature. On average, low-income students do not perform as well as their peers in K-12, have lower standardized test scores, and are less likely to enroll in a college or a university.

In 2007-2008, approximately 28% of high school graduates from high poverty schools attended fouryear postsecondary institutions after graduation, while 52% of graduates from low poverty schools attended four-year institutions [2]. Note that poverty levels are determined by the number of students who qualify for free or reduced lunch.

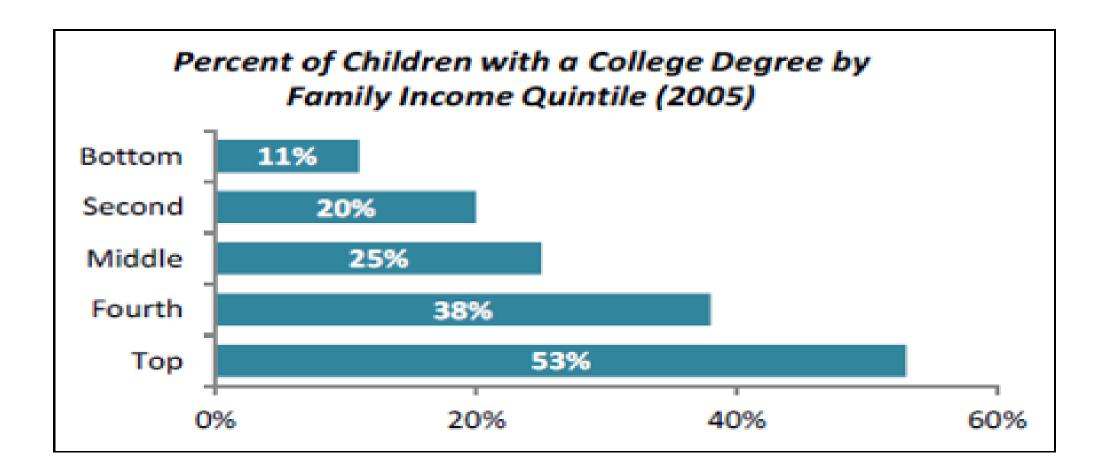


Figure 1: Source: Panel Study of Income Dynamics, U. of Mich.

The CCA Urban ACT Prep Program

Daniel Brumley, Jacintha Lawrence, University of Central Oklahoma Advisors: Dr. Britney Hopkins, Dr. Kristi Karber

Income and ACT Performance

The achievement gap is also reflected in low-income students' ability to reach the ACT College Readiness Benchmarks. These benchmarks are set by ACT, and if the benchmark is achieved, then a student has a 50% chance of making a "B" or higher and a 75% chance of making a "C" or higher in the corresponding first year college course.

Not only are these benchmark proportions stunningly low, they are significantly lower than their economically stable peers - the biggest gap being 20% on the mathematics portion of the ACT.

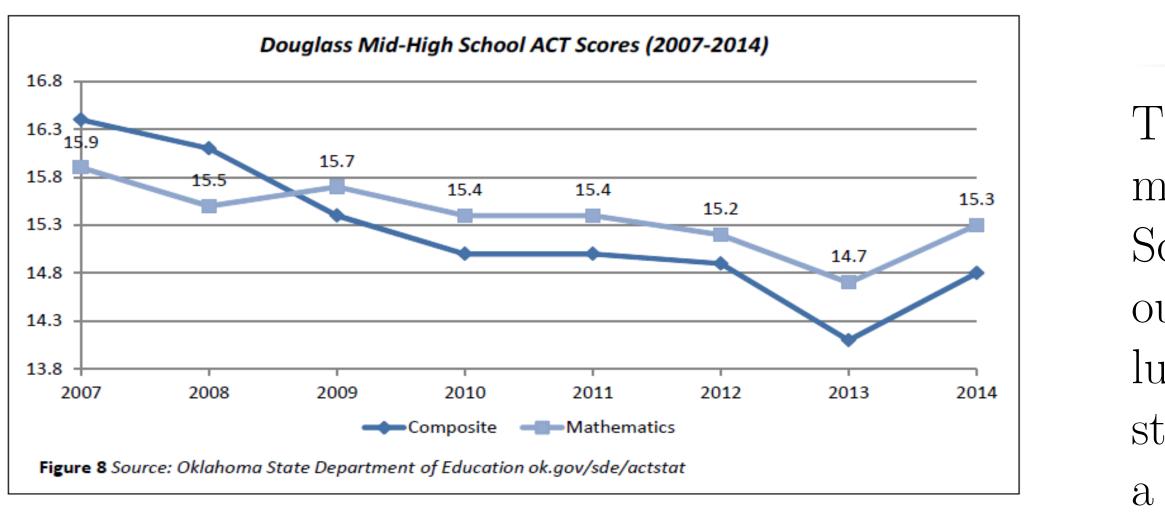
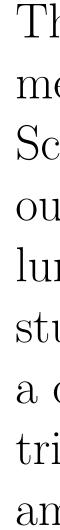


Figure 3: Source: Oklahoma State Department of Education ok.gov/sde/actstat



Program Goals

The CCA Urban ACT Prep Program is an inner city tutoring program targeting low-income high school students. UCO students work hand-in-hand with the advisors to design and implement a program of study aimed at raising scores on the mathematics portion of the ACT. The goals of the program are:

- 1. To help underprivileged students gain college admittance by providing them preparatory and financial support for the ACT that otherwise is unavailable to them.
- 2. To hone underprivileged students' study skills so that they will be more successful once entering college.
- **3**. To provide students at UCO a transformative learning experience that engages them in the community while preparing them for employment.

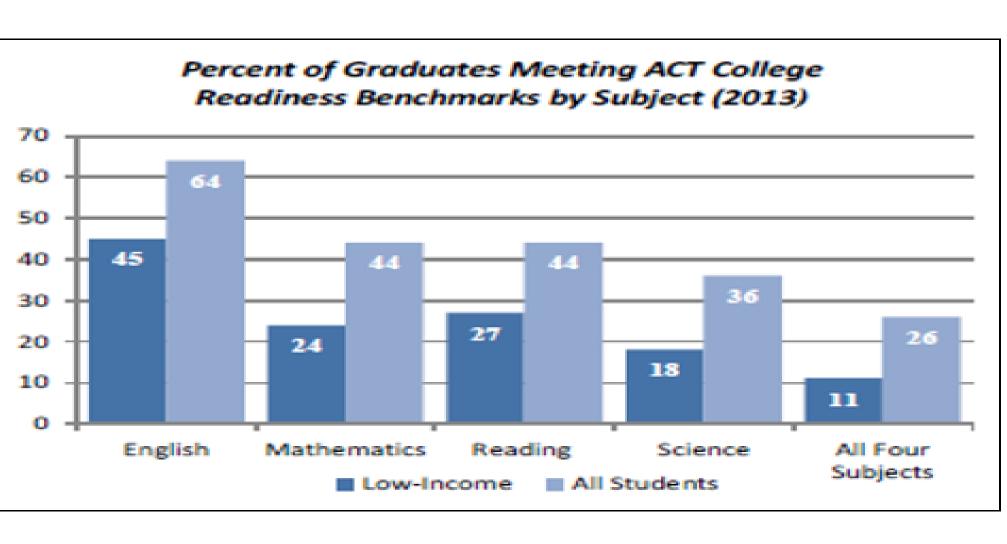


Figure 2: Source: [1]

Douglass Mid-High School

The Oklahoma City Public School District has numerous high-poverty schools. At Douglass Mid-High School, located near downtown Oklahoma City, 8.5 out of 10 students are eligible for free or reduced lunch. Last year, the average ACT math score of students testing at Douglass was 15.3 compared to a district average of 18. These low scores are a contributing factor to the poor college admittance rates among low-income students.

To date, the CCA Urban ACT Prep Program has helped nine low-income students from Douglass Mid-High School. Tutors from the University of Central Oklahoma have met with the students on a weekly basis for the past semester and a half. During this time, all students have been administered practice tests designed by the tutors to assess their levels of mathematical comprehension. These tests were adapted from the ACT's College and Career Readiness Standards and fashioned in such a way as to simulate an actual ACT.

Based on the results of these initial tests, it was found that most of the students were not performing at their respective grade levels. Consequently, the original goals of the program have been modified to accommodate the students' needs. Rather than preparing some of the students for the ACT, tutors have been working with the students to help them succeed on their end of instruction (EOI) exams.

[1] The condition of college and career readiness 2013: Students from low-income families. [2] T. Ross, G. Kena, A. Rathbun, A. KewalRamani, J. Zhang, P. Kristapovich, and E. Manning. Higher education: Gaps in access and persistence study: Statistical report, 2012.

This work was funded by a grant from the Office of Research and Sponsored Programs at the University of Central Oklahoma and the Center for Conscience in Action (CCA).

We would also like to thank the Sustainable Science Academy for contributing a safe learning environment for students and tutors alike.

Preliminary Report

References

Acknowledgements

Contact Information

Daniel Brumley: dbrumley1@uco.edu

Jacintha Lawrence: jlawrence9@uco.edu