An Overview of Results
The Treatment Group was provided instruction on library research skills through seven online Library Research Guides. These Library Research Guides, developed by JSRCC research librarians, were integrated into courses through Blackboard, regardless of the actual course delivery. The majority of the courses were on-campus sections. The Control Group received normal, instructor-led, introductions to library research skills; none of the Library Research Guides were integrated within the courses.

Treatment Group Results vs. Control Group Results

Summary
At pre-test time, the average scores of students in the control sections versus the treatment sections demonstrated no reliable difference between the two groups.

On average, the students in the control group started out about the same level as those in the treatment group. Overall, students scored an average of 93.41 points (SD = 21.21
points). This score represents an average of about 62% correct. *This data also confirms that ENG112 is an appropriate site for information literacy skills: students enter ENG112 with some basic understanding of research skills but not enough to demonstrate competency in this area of learning.*

At post-test time, both the treatment group and the controls **made significant progress**. Both lines have a significant positive slope.

- The control group improved by 7.30 points, on average.
- The treatment group improved by 20.15 points, on average.
- “This is a **WHOPPING EFFECT** in the treatment group, **AND IT IS INCREMENTALLY LARGER THAN** the effect observed in the control group.” – Sandi Fulton, Coordinator of Assessment and Institutional Research
- By the time of the post-test, the treatment group achieved a solid level of “competency” in research skills, scoring 76%, on average. The control group neared “competency,” averaging at 66%.

**Results According to Ethnicity**

![A Significant Interaction between Race/Ethnicity and Time of Test](image)

**Summary**

At pre-test time, African American students scored significantly lower than White students, on average.

The average scores of students classified as Other indicate **no reliable difference** between “Other and White,” or “Other and African American.”

FIPSE/QEP Student Learning Outcomes Assessment
By post-test time, however, African American students’ scores were commensurate with the scores of other students, on average.

The slope of the blue line (African American students) is steeper than the slope of the other two groups.

The difference in slopes of the blue line (African American students) and the brown line (White students) is statistically significant.

On average, African American students began the semester scoring at an average of 55% correct responses. By post-test, however, they were earning about 69% correct, on average, which is commensurate with the 74% correct average for White students and the 68% correct average for Other students.

“By the end of the course, everyone had made progress, but African American students had compensated for an initial disadvantage. Something is happening in ENG 112 that is leveling the playing field for African American students, at least in terms of information literacy skills.” – Sandi Fulton, Coordinator of Assessment and Institutional Research

The Good News:

- ENG112 is having a direct and significant impact on student learning outcomes in the area of information literacy.

- The integration of online library research guides within ENG112 results in even more significant gains for students in research skills.

- African American students begin ENG112 with information literacy skills that are at a disadvantage when compared to Caucasian students and to students classified as “Other.” However, African American students make the most significant gain in learning by the end of a semester, surpass the “Other” category, and reach very close to “competency” level by time of post-test.