Out of the Box Snapshots

Analysis of Student Performance at the Intersection of Diversity and Information Literacy

Student researchers: Michael Dalrymple, Senior, and Josh Woodard, Sophomore

Our research aimed to explore the intersection between institutional student data and information literacy (IL) knowledge and retention. Our study analyzed student performance in a single technology course over one semester, which contained specific IL-related assignments. There is limited research connecting student performance in any subject to their institutional self-disclosed data, especially connecting students' IL performance with their precollege experiences.

Our study was designed to create a holistic view of students' IL academic abilities by connecting their in-class IL performance with a variety of precollege variables and variables pertaining to their college experience. We investigated different diversity factors between students, comparing nine distinct variables that included self-reported and institutional information about students from before, during, and after taking the class.

After conducting multiple significance tests on our data, we found 11 total statistically significant relationships. These relationships showed that students who were part of minority groups such as having underrepresented minority or first-generation student status tended to perform less well overall on the IL assignments. The data also showed that students coming from higher ranked high schools also performed better than those who came from the lower ranked schools. This information suggests that certain diversity groups could benefit from redesigned IL education. Additionally, the study suggests that some students could benefit from more support generally inside and outside of the classroom setting. We hope that our research will inspire other studies on this subject, as much more information is needed.

Special thanks to Taylor Brodner for research assistance.

Research advisor Natasha Johnson writes: "When conducting research using institutional data, it takes fresh eyes to understand what it all means in the context of student performance. Michael Dalrymple and Josh Woodard were able to assist in defining variables and synthesizing overlapping parameters to create a picture of what diversity looks like in a single classroom."
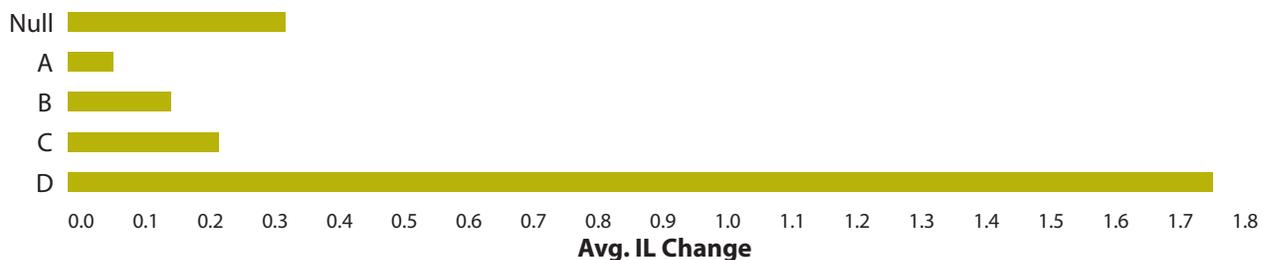
A comparison of high school rank to the change in scores (on a 4.0 GPA scale) between the first and last Information Literacy assessments.

Dalrymple, M., & Woodard, J. (2018). Analysis of student performance at the intersection of diversity and information literacy. *Journal of Purdue Undergraduate Research, 8,* 96. https://doi.org/10.5703/1288284316769