Recent Findings: Transparency in Learning and Teaching in Higher Education

A 2015 study (Winkelmes, et al., (Peer Review, Winter/Spring 2016) identified transparent teaching about problem-centered learning as an easily replicable teaching method that produces learning benefits already linked with students’ success. This simple, replicable teaching intervention demonstrably enhanced the success of first-generation, low-income and underrepresented college students in multiple ways at statistically significant levels, with a medium-to-large sized magnitude of effect. The results offer implications for how faculty and educational developers can help their institutions to right the inequities in college students’ educational experiences across the country by contributing to efforts to increase underserved students’ success, especially in their first year of college (when the greatest numbers drop out).

In 2014-2015 a group of 7 Minority Serving Institutions launched a pilot project that included 1180 students and 35 faculty. Tia McNair and Ashley Finley at the Association of American Colleges & Universities (AAC&U) led the project in partnership with Mary-Ann Winkelmes at the University of Nevada, Las Vegas’ Transparency in Learning and Teaching in Higher Education Project (TILT Higher Ed), with funding from TG Philanthropy. The main research goal was to study how faculty transparency about the design and problem-centered nature of student assignments would affect students’ learning experiences and the quality of students’ work. Faculty received training on how to make two take-home assignments in a course more transparent (accessible) and problem-centered (relevant) for students, and each instructor taught a control group and an intervention group of the same course in the same term. Results were measured via online surveys about students’ learning experiences before and after each course, and direct assessment of students’ work. Students who received more transparency reported gains in three areas that are important predictors of students’ success: academic confidence, sense of belonging, and mastery of the skills that employers value most when hiring. While the benefits for all students in the aggregate who received more transparency were statistically significant, the benefits for first-generation, low-income and underrepresented students were greater, with a medium-to-large sized magnitude of effect. Important studies have already connected academic confidence and sense of belonging with students’ greater persistence and higher grades (Walton and Cohen 2011, Aronson et al 2002, Paunesku et al 2015), and recent national surveys identify the skills that employers value most when hiring new employees (Hart 2015 and 2013).

A simultaneous study of 1,143 University of Nevada, Las Vegas (UNLV) students’ retention rates indicated that increases to academic confidence, sense of belonging and perceived mastery of employer-valued skills were indeed followed by greater persistence: 90.2% of UNLV undergraduates in more transparent introductory-level courses returned to complete the fall term of the subsequent academic year, in contrast to the average retention rate of 74.1% for first-time, full-time, first-year students.

TILT Higher Ed and the AAC&U continue to promote transparency and problem-centered learning. TILT Higher Ed participants include more than 25,000 students in hundreds of courses at 40 higher education institutions in the U.S. and five other countries.

End of Term: Skills, Confidence, and Belonging - Less vs. More Transparent Courses, First Generation Students

![Graph showing the comparison of end-of-term skills, confidence, and belonging between less and more transparent courses for first generation students.](http://www.unlv.edu/provost/teachingandlearning)

**N:** number of students responding  
**M:** one standard error  
**ES:** effect size (Hedges’ G)**  
**Less Transparent:** mean perceived transparency <3.3/4  
**More Transparent:** mean =3.3/4


Publications and information about the Transparency in Learning and Teaching Project are at: [www.unlv.edu/provost/teachingandlearning](http://www.unlv.edu/provost/teachingandlearning)