Recent Findings: Transparency in Learning and Teaching in Higher Education

A national study with the Association of American Colleges & Universities (AAC&U) funded by TG Philanthropy demonstrated that transparent instruction about problem-centered assignments has significant, equitable benefits for undergraduate students (Winkelmes, et al., Peer Review, Winter 2016), while a separate UNLV study indicated those benefits are long-term (Winkelmes, et al., forthcoming). Just two instances of transparent instruction in a term significantly enhanced students' success, with even greater gains for first-generation, low-income and underrepresented college students. These findings offer implications for how faculty and educational developers can adopt transparent instruction to help their institutions to right the inequities in college students' educational experiences across the country, especially in the first year of college (when the greatest numbers of students drop out).

- **AAC&U study:**
  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 transparent instruction reported gains in three areas that are important predictors of students' success: 1) academic confidence, 2) sense of belonging, and 3) awareness of their 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 & Cohen, 2011; Aronson, et al., 2002; Paunesku, et al., 2015). Scholars have identified metacognition as an essential learning skill (NRC, 2000; Wang, et al. 1994), and recent national surveys identify the skills that employers value most when hiring new employees (Hart, 2015, 2013).

- **UNLV study:**
  A study of 871 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. First-time, full-time, first-year students in primarily transparent courses in Fall 2016 were retained as registered students one year later at a rate 15.52% higher than the rest of their cohort.Two years later, those students who had received transparent instruction when they were first-time full-time first-year students persisted as full-time students at UNLV at a rate 13.92% greater than the rest of their cohort. As in the AAC&U study, the gains were greater for underserved students. For example, the mean retention gain for the group of 361 low-income students who received transparent instruction in their first year was 19.74% greater than the rest of their cohort after one year, and 19.52% greater than the rest of their cohort after 2 years (TILT Survey, 2015-2017; UNLV Data Warehouse, 2018).

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 over 50 higher education institutions in the U.S. and five other countries.

Publications and information about the Transparency in Learning and Teaching Project are at: **TILTHigherEd.org**

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