

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).

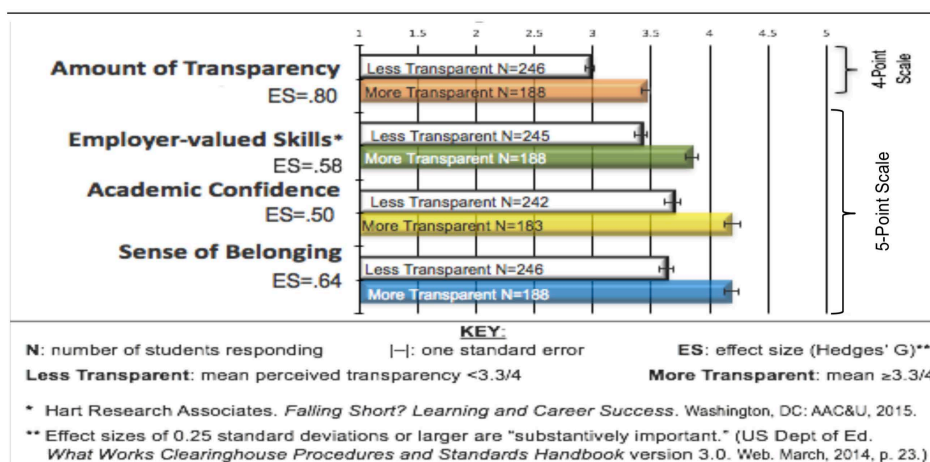
- **AAC&U study:**

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 AAC&U led the project in partnership with Mary-Ann Winkelmes at UNLV's 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 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).

End of Term: Skills, Confidence, and Belonging - Less vs. More Transparent Courses, First Generation 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 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 UNLV's TILT website (see bottom-left corner) and **TILTHigherEd.org**

Transparent Assignment Template

© 2016 Mary-Ann Winkelmes

This template can be used as a guide for developing, explaining, and discussing class activities and out-of-class assignments. Making these aspects of each course activity or assignment explicitly clear to students has demonstrably enhanced students' learning in a national study.¹

Assignment Name

Due date:

Purpose: Define the learning objectives, in language and terms that help students recognize how this assignment will benefit their learning. Indicate how these are connected with institutional learning outcomes, and how the specific knowledge and skills involved in this assignment will be important in students' lives beyond the contexts of this assignment, this course, and this college.

Skills: The purpose of this assignment is to help you practice the following skills that are essential to your success in this course / in school / in this field / in professional life beyond school:

Terms from Bloom's Taxonomy of Educational Objectives may help you explain these skills in language students will understand. Listed from cognitively simple to most complex, these skills are:

- understanding basic disciplinary knowledge and methods/tools
- applying basic disciplinary knowledge/tools to problem-solving in a similar but unfamiliar context
- analyzing
- synthesizing
- judging/evaluating and selecting best solutions
- creating/inventing a new interpretation, product, theory

Knowledge: This assignment will also help you to become familiar with the following important content knowledge in this discipline:

- 1.
- 2.

Task: Define what activities the student should do/perform. "Question cues" from this chart might be helpful: <http://www.asainstitute.org/conference2013/handouts/20-Bloom-Question-Cues-Chart.pdf>. List any steps or guidelines, or a recommended sequence for the students' efforts. Specify any extraneous mistakes to be avoided.

Criteria for Success:

Define the characteristics of the finished product. Provide multiple, annotated examples of what these characteristics look like in practice, to encourage students' creativity and reduce their incentive to copy any one example too closely. With students, collaboratively analyze examples of work before the students begin working. Explain how excellent work differs from adequate work. It is often useful to provide or compile with students a checklist of characteristics of successful work. This enables students to evaluate the quality of their own efforts while they are working, and to judge the success of their completed work. Students can also use the checklist to provide feedback on peers' coursework. Indicate whether this task/product will be graded and/or how it factors into the student's overall grade for the course. Later, asking students to reflect and comment on their completed, graded work allows them to focus on changes to their learning strategies that might improve their future work.

The author developed an earlier version of this template at the University of Illinois, Urbana-Champaign.

¹ Winkelmes, Mary-Ann. "Transparency in Teaching: Faculty Share Data and Improve Students' Learning." *Liberal Education* 99,2 (Spring 2013); Winkelmes et al, "A Teaching Intervention that Increases Underserved College Students' Success." *Peer Review* 18,1/2 (Winter/Spring 2016).