

Dear Professor _____:

Thank you very much for your important participation in the Transparency in Learning and Teaching in Higher Education Project. I am pleased to share with you this confidential report on your students' anonymous, aggregate responses to the Transparency Survey. This report contains:

- o *TILT* Higher Ed Overview page 1
- o Tips for Reading Your Report page 2
- o Recent Findings page 3
- o Data for your course
 - Chart A: Students in Your Course and in Similar "Transparent" Courses page 4
 - Chart B: Students' Mean Responses Your Course, End of Term page 5
 - Chart C: Students' Mean Responses in Similar Transparent Courses page 6
 - Chart D: Students' Mean Responses Your Course, Beginning and End of Term page 7
- o APPENDIX 1: Teaching and Learning Methods explored by the Transparency Project
- o APPENDIX 2: List of Transparency Survey Questions
- o APPENDIX 3: Links to further information

I'm grateful for your involvement in this project, and I hope you'll consider participating again and encouraging colleagues to do so. With increasing numbers of teachers and students, we expect to expand the opportunities for all higher education students to succeed, and to determine the impact of various transparent methods on students' learning across a greater variety of disciplines, levels of expertise, course formats and class sizes.

Please send any questions that arise and/or suggestions you have for improving *TILT* Higher Ed's efforts to increase students' success in higher education.

Sincerely,



Mary-Ann Winkelmes, Ph.D., Principal Investigator

OVERVIEW

The Transparency in Learning and Teaching in Higher Education project (*TILT Higher Ed*) is an award-winning national educational development and research project that helps faculty to implement a transparent teaching framework, making small changes to their teaching practice that can promote college students' success significantly and equitably. Beginning with the aim of informing teachers' decisions about the teaching adjustment that would best benefit their own populations of students, *TILT's* activities have expanded to include:

- Workshops for both faculty and students
- Online surveys that help faculty to gather, share and promptly benefit from data about students' learning by coordinating efforts across disciplines, institutions, countries
- Confidential reporting of survey results to faculty
- Collaborative research on students' learning experiences relative to teaching practices

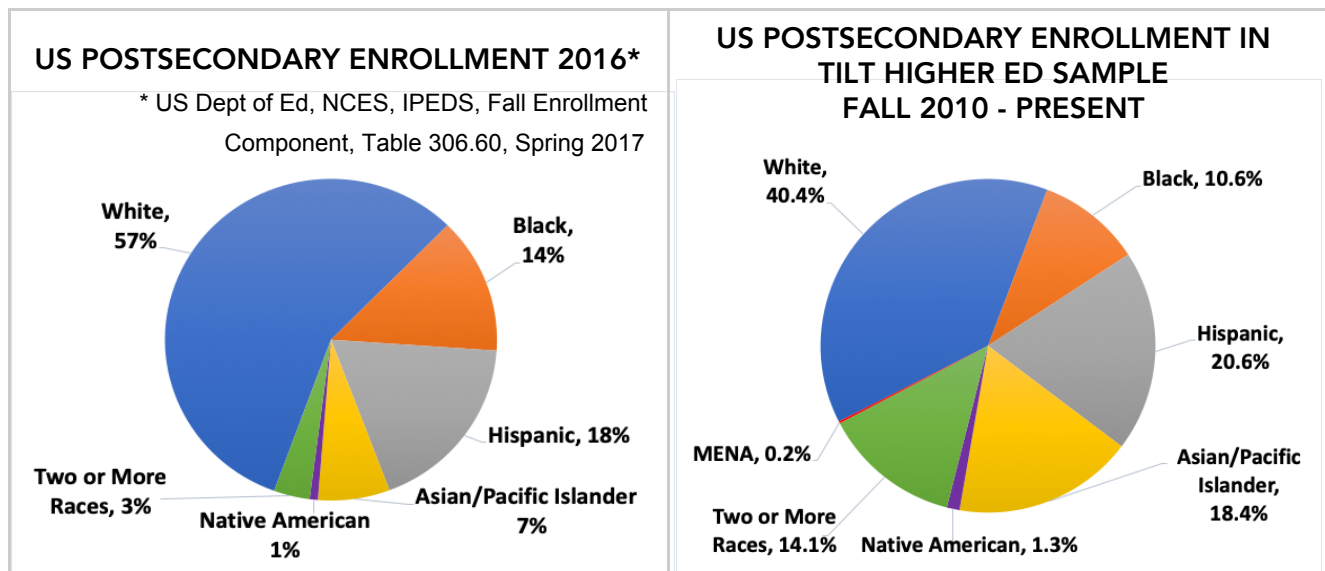
The Project identifies a variety of transparent teaching practices that benefit students' learning when faculty choose to implement them at their own discretion as adjustments to their own teaching practice. Students gain short- and long-term learning benefits, and greater awareness of critical thinking skills. For faculty, the Project helps to identify worthwhile teaching adjustments specific to discipline, level of expertise, student demographics and even class size.

Since 2010, *TILT Higher Ed* has involved over 40,000 students in hundreds of courses at more than forty institutions in seven countries. The response rates are high for a voluntary survey.

Table 1: TILT Higher Ed Transparency Online Survey Response Rates, Fall 2010 - Present

Course Size	Total Enrollment	Total Number of Responses	Avg Rate of Return
< or =30	8936	5338	59.74%
31-65	8319	2493	29.97%
66-299	19681	5952	30.24%
> or = 300	13137	1638	12.47%
Grand Totals	50073	15421	30.80%

Table 2: Ethnicities of TILT Higher Ed Survey Respondents



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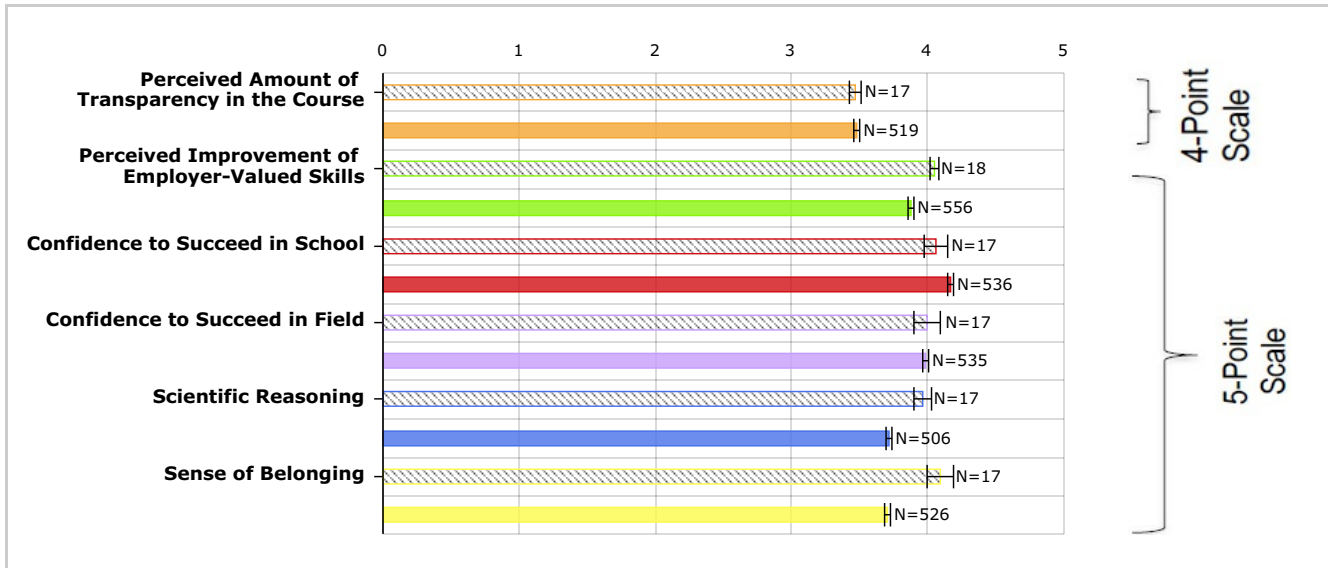
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Chart A: Students in Your Course (white bars) and in Similar "Transparent" Courses

Chart A offers a broad overview of your students' learning experiences. Each pair of bars corresponds to a group of TILT survey questions that your students answered.

- Striped gray bars correspond to your course in the bar charts.
- Solid colored bars correspond to other courses in our project where students received transparent instruction in courses that are similar to your course in terms of the discipline and level.

The Chart A key indicates which TILT survey questions correspond to which pair of bars. For example, the orange bars indicate students' views of the amount of transparency in the course, calculated from the students' combined mean responses to TILT survey questions 36-44.



KEY	1	2	3	4	5	Transparency Survey Questions
Perceived Amount of Transparency in the Course	Never	Sometimes	Often	Always	-----	36 - 44
Perceived Improvement of Employer-Valued Skills	Not at all	A little	Moderate	A lot	A great deal	4-6, 8-12 21, 22, 24
Confidence to Succeed In School	Much less	Somewhat less	No difference	Somewhat more	Much more	25
Confidence to Succeed In Field						26
Scientific Reasoning	Not at all	A little	Moderate	A lot	A great deal	45 - 47
Sense of Belonging						33-35, 48-49

N: number of students responding

Error Bars Indicate +/- 1 SE

Less Transparent: mean perceived transparency < 3.3/4

More Transparent: mean perceived transparency ≥ 3.3/4

ES: effect size (Hedges' G). Effect size of 0.25 for standard deviations or larger are "substantively Important." [U.S. Department of Education, *What works Clearinghouse Procedure and Standards Handbook?*, version 3.0. Web. March 2014, p.23.]

*Hart Research Associate employer surveys. *Falling Short?(2015), It take more than a Major(2013, Raising the Bar (2009).*

Gray bars: Your Students

Colored bars: Students in Similar Transparent Courses

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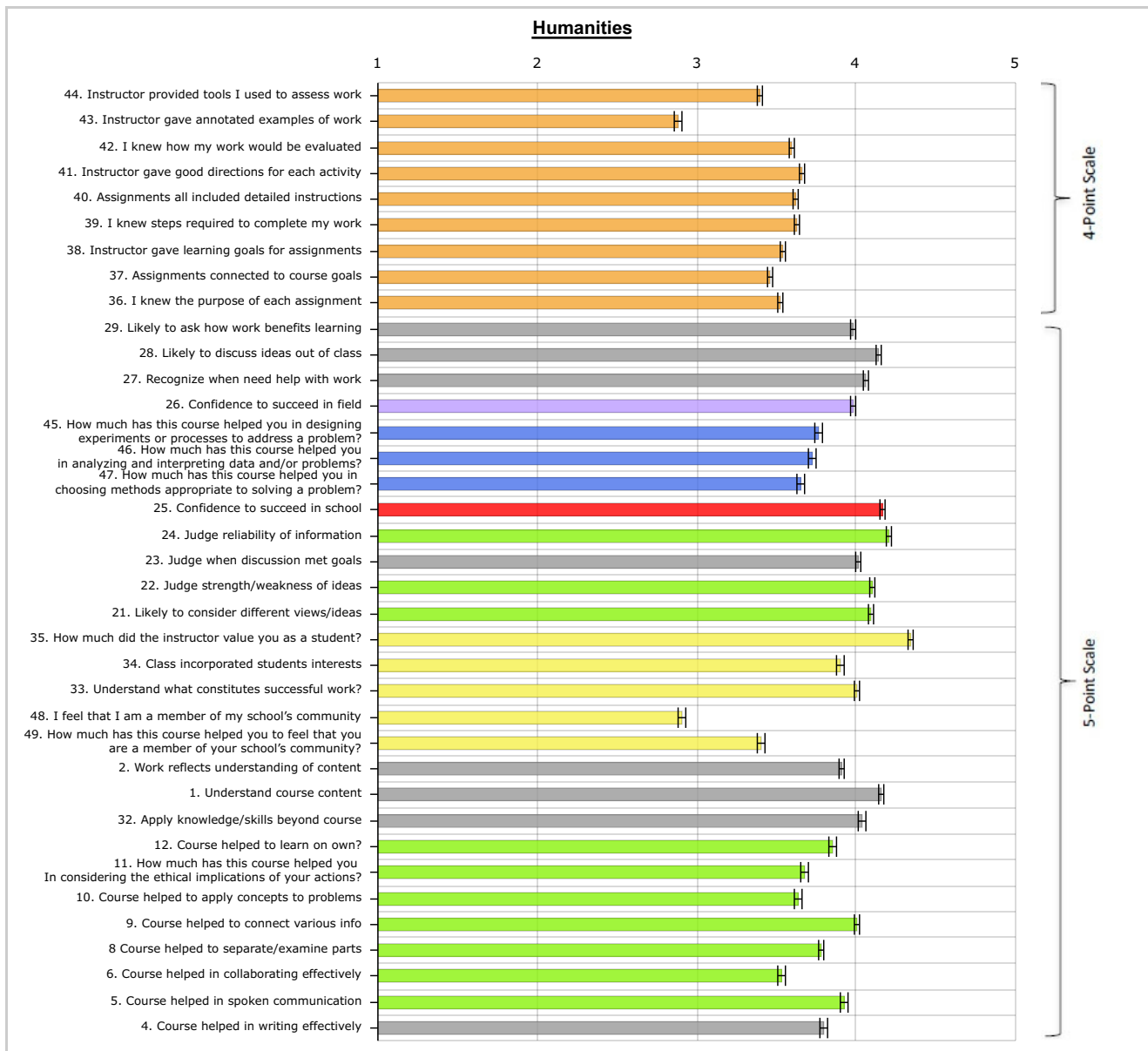
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Chart C: Students' Mean Responses in Similar TRANSPARENT Courses

Appendix 2 contains full text of Transparency Project survey questions/responses.



KEY	1	2	3	4	5	Transparency Survey Questions
Perceived Amount of Transparency in the Course	Never	Sometimes	Often	Always	-----	36 - 44
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*Hart Research Associate employer surveys. *Falling Short?*(2015), *It take more than a Major*(2013), *Raising the Bar* (2009).

Chart D: Your Students' Mean Responses Beginning and End of Term*

Chart D offers your students' views about their learning at the beginning and end of the term.



■ How Much This Course Helped (5-Point Scale) ■ Beginning of Term (4-Point Scale)
■ End of Term (4-Point Scale)

** Hart Research Associates employer surveys: *Falling Short?* (2015), *It Takes More Than a Major* (2013), *Raising the Bar* (2009).

APPENDIX 1: Transparent Methods Explored by TILT Higher Ed

Transparent teaching methods help students understand *how* and *why* they are learning course content in particular ways. This list of options is adapted frequently as faculty participants identify further ways to provide explicit information to students about learning and teaching practices. **Faculty participants usually employ one option** from the list and students indicate the impact of this small change when they complete an online survey (taking about 10-12 minutes) at the end of the course. Please email mary-ann.winkelmes@unlv.edu to add your suggestions to the list.

Discuss assignment learning goals and design rationale before students begin each assignment

- Chart out the skills students will practice in each assignments [\[See example\]](#)
- Begin each assignment by defining the learning benefits to students (skills practiced, content knowledge gained, the tasks to be completed, the criteria for success)
 - Examples: Transparent Assignment Templates for [Faculty](#), [students](#);
- Provide criteria for success in advance [\[See example 1 research paper\]](#), [example 2 lab report.](#)
- Offer examples of successful work, and annotate them to indicate how criteria apply. [\[See examples.\]](#)
- Additional examples [\[See examples.\]](#)

Invite students to participate in class planning, agenda construction

- Give students an advanced agenda (2 or 3 main topics) 1-2 days before class, and ask them to identify related sub topics, examples or applications they wish to learn about
- Review the agenda at the outset of each class meeting, including students' subtopics
- Explicitly evaluate progress toward fulfilling the agenda at conclusion of each class meeting
- In large courses, a class committee gathers and contributes students' subtopics to agendas
- Inform students about ideas and questions to be discussed in upcoming class meeting

Gauge students' understanding during class via peer work the requires students to apply concepts you've taught

- Create scenarios/applications to test understanding of key concepts during class [\[See example 1 description of Eric Mazur's method\]](#) and [video examples of peer instructions, example 2 clickers best practices NCBI.](#)
- Allow discussion in pairs, instructor's feedback, and more discussion
- Provide explicit assessment of students' understanding, with further explanation if needed, before moving on to teach the next concept

Explicitly connect "how people learn" data with course activities when students struggle at difficult transition points

- Offer research-based explanations about concepts or tasks that students often struggle to master in your discipline [See examples below including Bloom, Bransford, Gregorc, Light, Perry.]
 - Bloom's taxonomy, and discipline-specific versions. [\[See examples.\]](#)
 - William Perry's Phase of intellectual Development, and subsequent work [\[See chart.\]](#)
 - Kathleen Butter / Antony Gregorc's Learning Styles [\[See example.\]](#)
 - Richard Light's Assessment Seminars [\[See summary of finding.\]](#)
 - Researcher on novice vs. expert thinking [\[See summary.\]](#)
 - Neuroscience: synapse formation and learning [\[See Bransford, et al, How People Learn.\]](#)
 - Carol Dweck: fixed vs. growth mindset [\[Summary diagram.\]](#)

Engage students in applying the grading criteria that you'll use on their work

- Share criteria for success and examples of good work (as above in "discuss assignments learning goals"), then ask students to apply these criteria in written feedback on peers drafts [\[See examples 1 Persuasive Writing Scholastic, example 2 Biology Northwestern U.\]](#)

Debrief graded tests and assignments in class

- Help students identify patterns in their returned, graded work: what kinds of test questions were missed; what types of weaknesses characterized the assigned work
- Let students review any changes or revisions they made, and whether these resulted in improvements or not
- Ask students to record the process steps they used to prepare for the exam or complete the assignment, and to analyze: which parts of the process were efficient, effective, ineffective

Offer running commentary on class discussion, indicating modes of thought or disciplinary method in use

- Explicitly identify what types of questioning/thinking and what skills of the discipline your students are using in each class meeting
- Invite students to describe the steps in their thought process for addressing/solving a problem
- Engage students in evaluating which types of thinking are most effective for addressing the issues in each class discussion

See www.unlv.edu/provost/transparency for live links to examples.

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APPENDIX 2: TILT Higher Ed End-of-Term Survey Questions

- With which of the following racial/ethnic groups (from the US Census categories below) do you identify? Please select all that apply.
 - White
 - Black, or African American
 - American Indian or Alaska Native. Please enter the name of your enrolled or principal tribe:
 - Asian Indian
 - Chinese
 - Filipino
 - Other Asian -- *for example, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on. Please indicate:*
 - Japanese
 - Korean
 - Vietnamese
 - Native Hawaiian
 - Guamanian or Chamorro
 - Samoan
 - Other Pacific Islander -- *for example, Fijian, Tongan, and so on. Please indicate:*
 - Middle Eastern / North African (MENA)
 - Some other race. Please indicate:
- Are you a citizen of the country in which this course is taught?
Response options: Yes, No, I prefer not to respond
- Which of the following types of schools have you attended other than the one you are attending now?
 - Vocational, technical or trade school
 - Community college, junior college or two-year college
 - University or college other than this one
 - None
 - Other
- Please select a category below that most closely matches your proposed major field of study.
 - Humanities
 - Social and Behavioral Sciences
 - Physical Sciences, Mathematics and Engineering
 - Life Sciences
- Are you a first-generation student (first in your family to attend):
 - College
 - Graduate school
 - I'm not a first generation student
- Are you a first-generation immigrant in the country where you are living?
- Are you a part-time student? Response options: Yes, No, Other
- Please identify the number of people in your household/family.
- Please choose the range that best represents your household/family's income.
 - 0-\$17,500
 - \$17,501-\$23,600
 - \$23,601-\$29,700
 - \$29,701-\$35,800
 - \$35,801-\$41,800
 - \$41,801-\$47,900
 - \$47,901-\$54,000
 - \$54,001-\$60,100
 - \$60,101-\$66,200
 - \$66,201-\$75,000
 - Above \$75,000
- Comments

APPENDIX 3: Selected Bibliography

A bibliography of publications with live links to full text is available at: www.unlv.edu/provost/teachingandlearning

- Winkelmes, Mary-Ann, Matthew Bernacki, Jeffrey Butler, Michelle Zochowski, Jennifer Golanics, and Kathryn Harriss Weavil. "[A Teaching Intervention that Increases Underserved College Students' Success.](#)" Peer Review (Winter/Spring 2016).
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- Winkelmes, Mary-Ann, et al. David E. Copeland, Ed Jorgensen, Alison Sloat, Anna Smedley, Peter Pizor, Katharine Johnson, and Sharon Jalene. "[Benefits \(some unexpected\) of Transparent Assignment Design.](#)"? *National Teaching and Learning Forum*, 24, 4 (May 2015), 4-6.
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- Cohen, Dov, Emily Kim, Jacinth Tan, Mary-Ann Winkelmes, "[A Note-Restructuring Intervention Increases Students' Exam Scores.](#)"? *College Teaching* vol. 61, no. 3 (2013): 95-99.
- Winkelmes, Mary-Ann. "[Transparency in Teaching: Faculty Share Data and Improve Students' Learning.](#)"? *Liberal Education* Association of American Colleges and Universities (Spring 2013).
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