

Enhancing Student Success through Transparency in Learning and Teaching

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Founder / Director, TILT Higher Ed



2009 – 2023

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Transparency in Learning and Teaching

Enhances Student Success and Engagement

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PURPOSE:

- Understand how transparent instruction improves student success
- Consider how you can use



TASKS:

- Research review
- Examples
- TILT your own materials



CRITERIA: You'll leave with

- Understanding of TILT and how it works
- Strategies, tools for applying TILT to your contexts
- Draft of a TILTed assignment (or collaborative staff project)

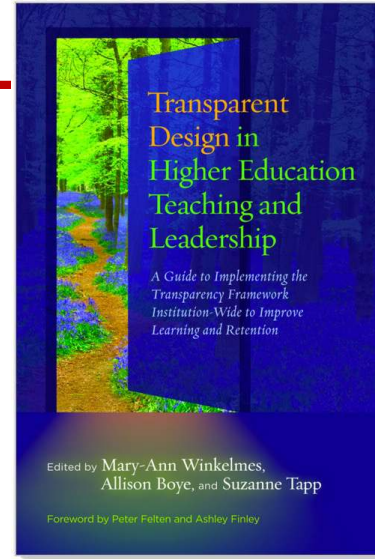
What is Transparent Instruction?

Transparent teaching and learning methods explicitly focus on:

- *how* students are learning course content,
- *why* we manipulate their learning experiences in particular ways
- *how* students will use this learning in their lives after college.

Why is it Gaining Attention?

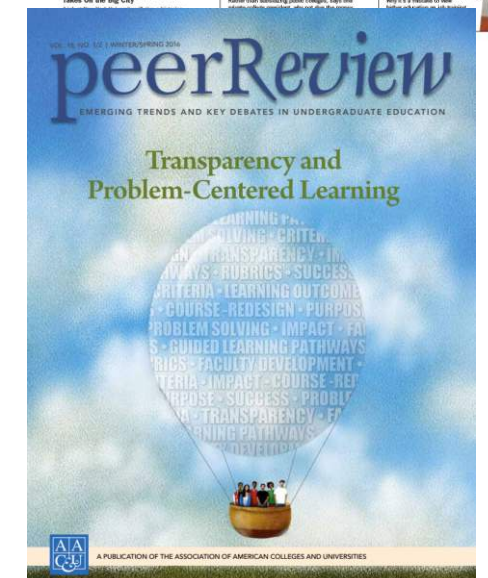
1. Small change; significant gains
2. Impact is equitable
3. Use now to complement ongoing efforts



The Transparency in Learning and Teaching project aims to improve higher education teaching and learning experiences for faculty and students through two main activities:

- 1 Promoting students' conscious understanding of how they learn
- 2 Enabling faculty to gather, share and promptly learn from each other about what works

- LOGIN
- PARTICIPATE
- ABOUT TILT
- TILT EXAMPLES & RESOURCES



Access ≠ Equity

- Underrepresented, first generation, low income: majority
50% as likely to complete college in 4 years

<https://nces.ed.gov/ipeds> Table 30448

- Gatekeepers stunt research
- High-achievement in HS can frustrate college success
- Well-prepared novices don't think like experts

Why TILT? Address Students' Challenges

Preparation

Underpreparation: writing, technology
Unclear about expectations, instructions
Don't recognize misunderstanding

Time management

Unaware of time required
Don't recognize all that is required
Competing commitments: family, work, extracurric.

Motivation

Fear of failure; reluctance to ask for help
Lack of confidence
Don't see relevance

Access to Resources

Transportation, Housing, Childcare
Mental health support
Technology

Why TILT: Help Students See Value

College education is relevant in work and day-to-day life

- Only 26% of employed graduates strongly agree
N = 110,481 employed adults, 18 to 65, who took at least some college courses

Strada-Gallup Education Survey, (2016-2019)

<http://stradaeducation.org/press-release/new-strada-gallup-consumer-data-reveal-only-26-percent-of-working-u-s-adults-with-college-experience-strongly-agree-their-education-is-relevant-to-their-work-and-day-to-day-life/>

Alumni who believe they developed in-demand professional skills

- are more likely to believe their education helped them achieve their goals.

N = 3309 alumni

2021 Strada Alumni Survey, (2021)

<https://cci.stradaeducation.org/pv-release-oct-27-2021/>

What Does TILT Look Like? Unwritten Rules



Purpose

- Skills practiced
 - Knowledge gained
- } long-term relevance to students' lives
} problem-centered



Task

- What students will do
- How to do it (actions to follow, avoid)



Criteria for success

- Checklist or rubric in advance so students can self-evaluate
- Multiple real-world examples: students/faculty apply criteria)

[Unwritten Rules for Students](https://tilthighered.com/assets/pdffiles/Transparent%20Assignment%20Template%20for%20Students_v2.pdf)

https://tilthighered.com/assets/pdffiles/Transparent%20Assignment%20Template%20for%20Students_v2.pdf

[Checklist for Instructors Designing Transparent Assignments](https://tilthighered.com/assets/pdffiles/Checklist%20for%20Designing%20a%20Transparent%20Assignment%20copy.pdf)

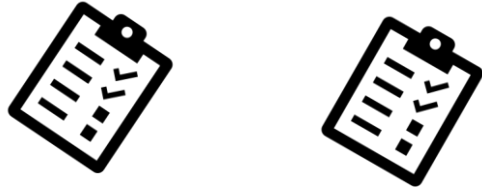
<https://tilthighered.com/assets/pdffiles/Checklist%20for%20Designing%20a%20Transparent%20Assignment%20copy.pdf>

How Do We Know TILT Works?

3 Research Studies

1. National Study of MSIs: AAC&U (TG Philanthropy)
2. University of Nevada, Las Vegas: Student Retention
3. WA state publics: 26 schools 2-year Assoc [24 schools]

3 Studies: Implementation



2 TILTed Assignments

1 Course, your way

- 2-hour training
- Community of practice
- Online TILT surveys
- Confidential Instructor Reports
- Presentations, publications

Results, 3 Studies:

- Significant learning gains for all

- Academic confidence

SUCCESS PREDICTORS

- Sense of belonging

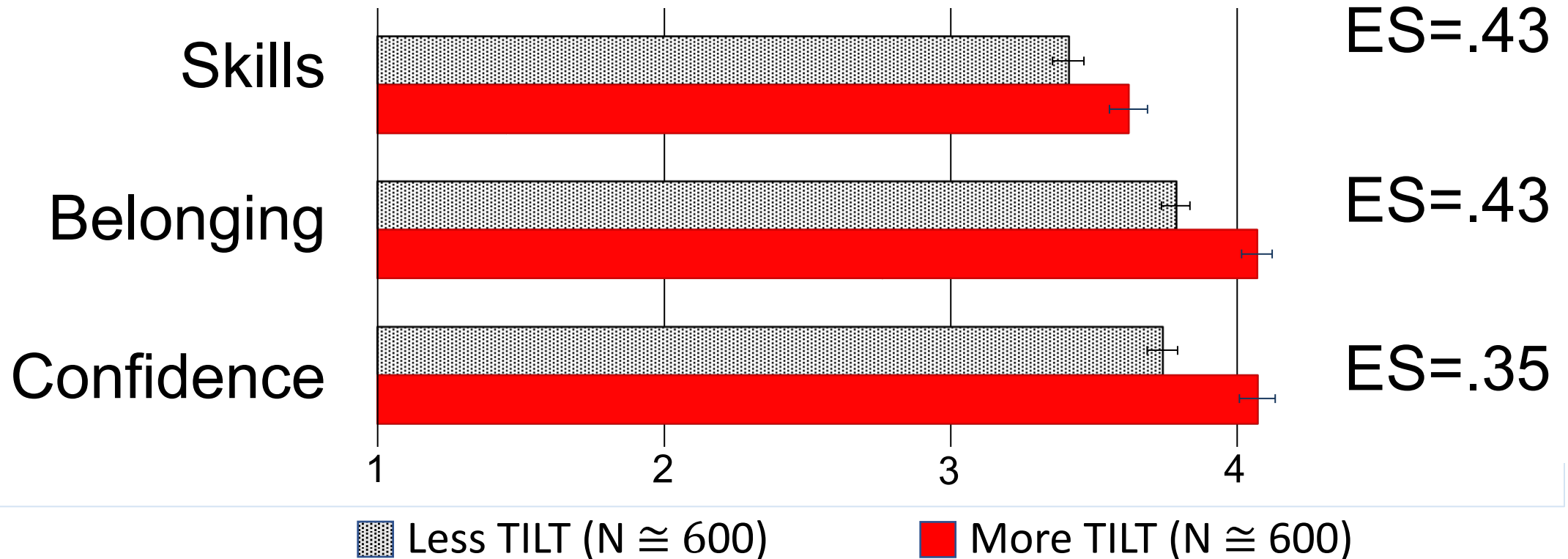
Increased persistence, grades

- Metacognitive awareness of skill development

- Greater gains for underserved students

- Higher retention rates into 2nd year, 3rd year

Significant Gains: All Students



ES: effect size (Hedges' G)

Less TILT: mean transparency < 3.34/4

More TILT ≥ 3.34/4

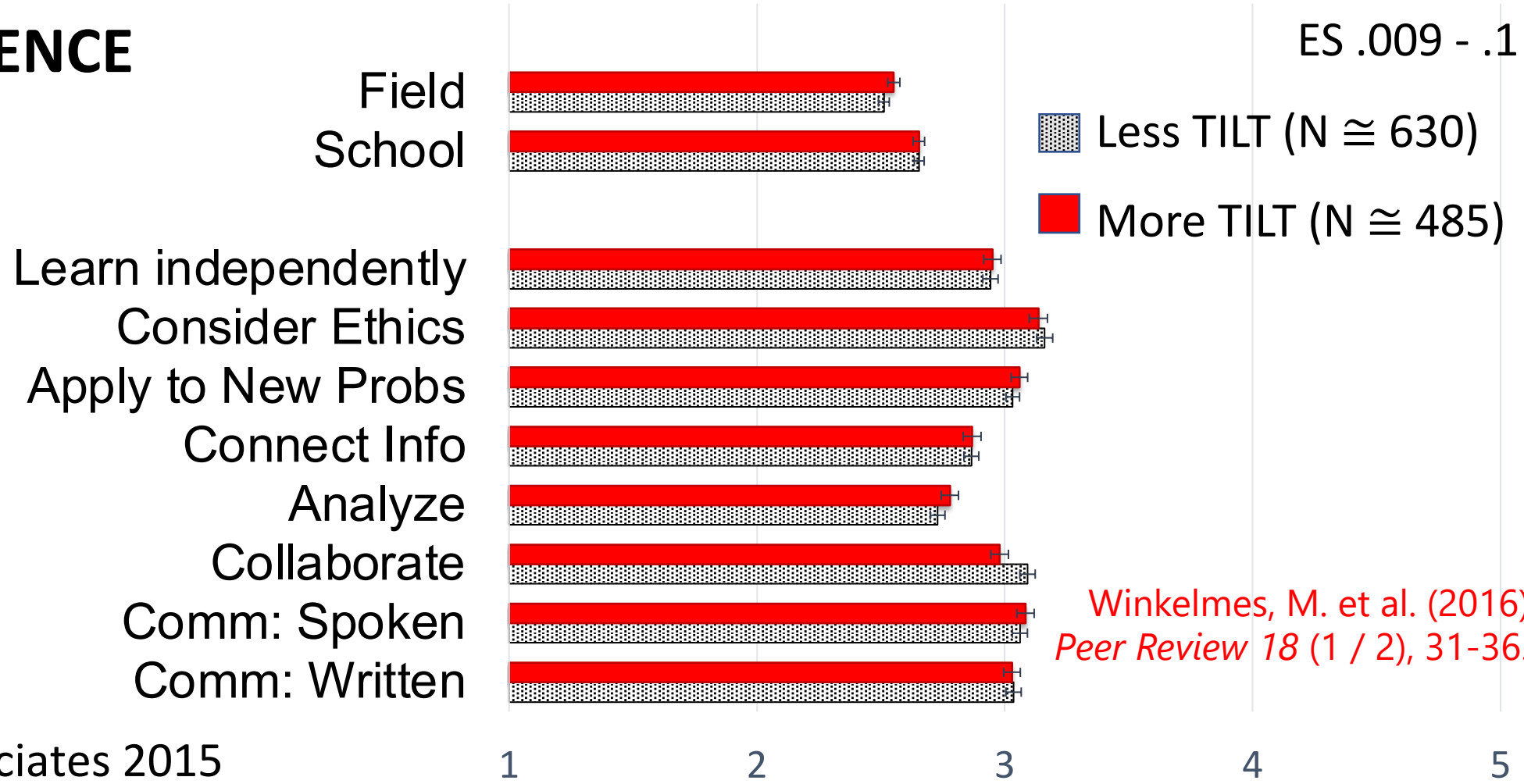
Winkelmes, M. et al. (2016). *Peer Review 18* (1 / 2), 31-36.



Baseline Equivalence

CONFIDENCE

SKILLS*

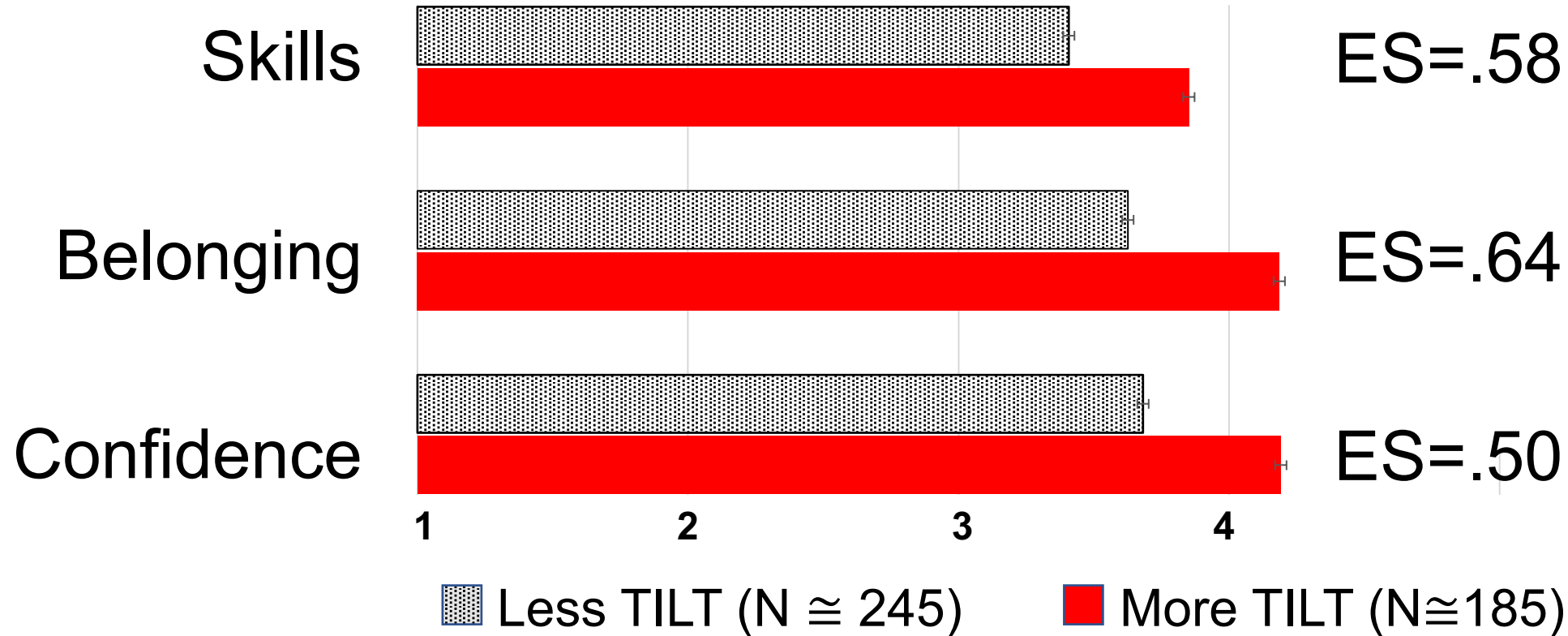


Winkelmes, M. et al. (2016).
Peer Review 18 (1 / 2), 31-36.

* Hart Associates 2015

Greater Gains: Underserved Students

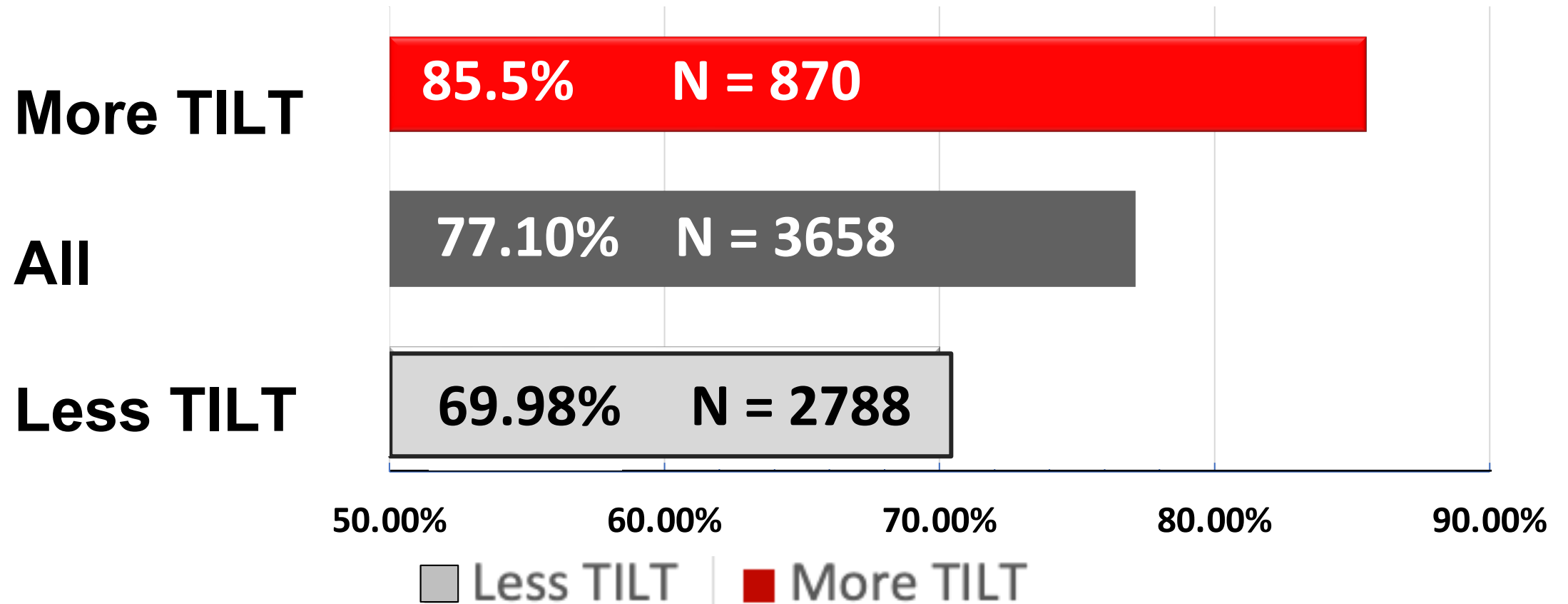
First Generation



Winkelmes, M. et al. (2016). *Peer Review* 18 (1 / 2), 31-36.

2nd Study: U Nevada Las Vegas

1-year Retention Increase 15.5%



(Sources: TILT Survey; UNLV Data Warehouse/Office of Decision Support, 10/23/2017 and 03/02/2018)

2-year Retention Increase 13.9%

More TILT

77.80% N = 677

All

67.20% N = 2458

Less TILT

63.88% N = 1781

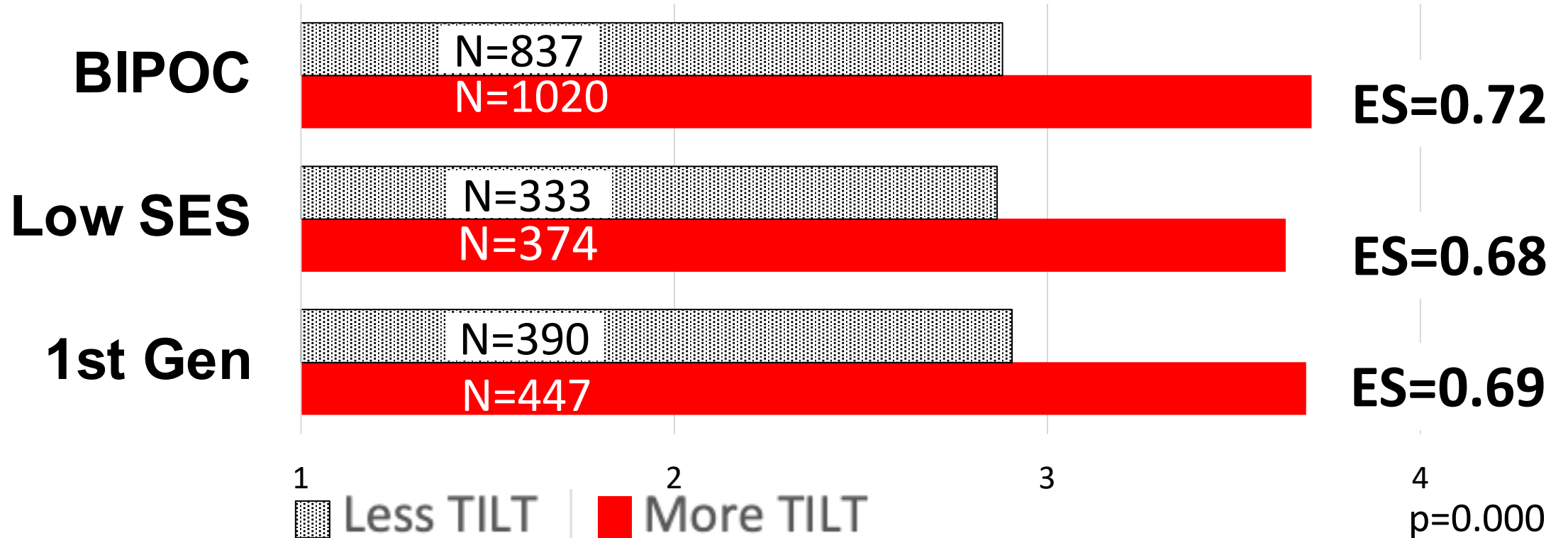
30% 40% 50% 60% 70% 80%

Less TILT | More TILT

Sources: TILT Survey; UNLV Data Warehouse/Office of Decision Support, 10/23/2017 and 03/02/2018

Students See Increased Skill:

COLLABORATING (All Disciplines)



Sources: TILT Survey; UNLV Data Warehouse/Office of Decision Support, 10/23/2017 and 03/02/2018

3rd Study:

WA State 2-year Publics

Confirmed that Transparency predicts significant gains:

- Skill Development
- Confidence
- Belonging

Gains are greater for underrepresented and low-income

Weisz, C., Richard, D., Oleson, K., Winkelmes, M., and Stone, B. In progress.

3 Studies: 2 Assignments, 1 Term



Purpose

- Skills practiced
 - Knowledge gained
- } long-term relevance to students' lives



Task

- What students will do
- How to do it (actions to follow, avoid)



Criteria for success

- Checklist or rubric in advance so students can self-evaluate
- What good work looks like (real world examples)

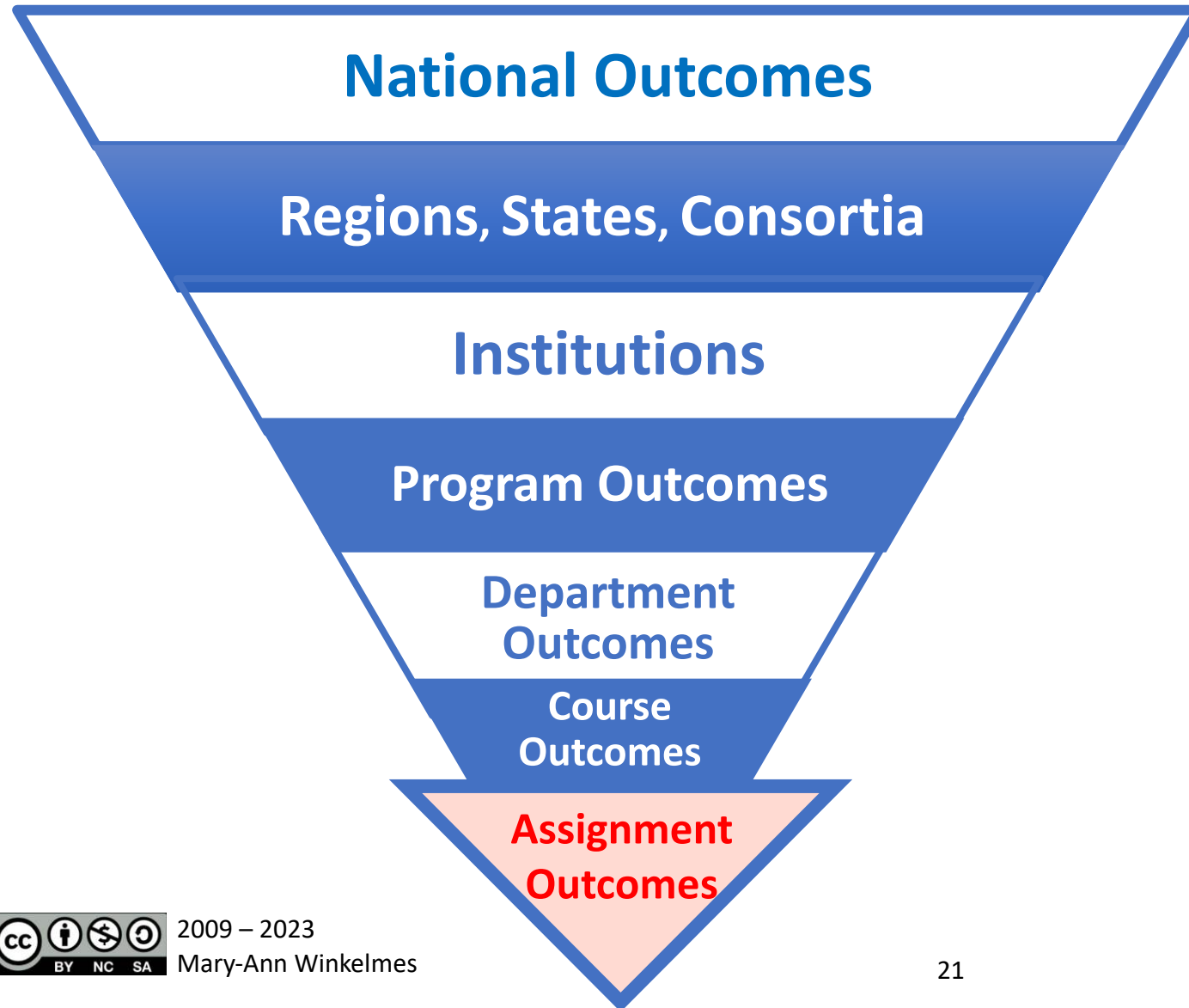
EXAMPLES of TILT in Higher Ed Contexts



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METRICS

- Employment / Employers
- National, regional, state grad rates, 4 – 6 year
- Drop/Withdraw/Fail rates
- Learning Outcomes
- Student satisfaction
- Metacognition
- Transfer of skills
- Grades, majors
- Faculty satisfaction



PURPOSE: Identify and declare a major



TASKS:

- Understand strengths/needs
- Locate info; Use Resources



CRITERIA:

- Develop self-reliance, confidence
- Declare a major before 48 credits

Winkelmes et al (2019) Transparent Design..., ch. 8.

Extracurricular Level: Work-study job



PURPOSE: Building Manager, UNLV

Practice communication skills, global/multi-cultural understanding, citizenship & ethics, critical thinking ...



TASKS:

Act as supervisor/role model, Provide training & tours

Know services & equipment, Follow emergency protocol



CRITERIA:

Reflect/identify learning outcomes gained

Winkelmes et al (2019) Transparent Design..., ch. 8.

EXAMPLES: ASSIGNMENTS

Why Groups?



PURPOSE:

- See what TILT looks like in practice (before and after)
- Discern what it takes to TILT *enough*



TASK:

- Apply TILT Framework to sample assignment

CRITERIA: You'll leave with

- Practice using the TILT Framework
- Readiness to TILT your assignments

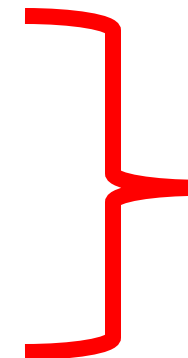


Example D: Intro Communications

Groups discuss

PURPOSE

1. What **knowledge** does the student gain?
2. Where is it specified (# 1 - 8)?
3. What **skills** does the student practice?



relevance

<https://tilthighered.com/assets/pdffiles/Example D.pdf>

Report Back

1. What knowledge does the student gain?
2. Where is it located (# 1 - 8)?
3. What skills does the student practice?

- Do you know Top 2 skills?
- **Who can succeed?**

Revised Example D

1. How does the *revised* assignment differ?
 2. How could the *revised* assignment be more transparent?
-
- **What does it take to *TILT* enough?**

TILT YOUR OWN ASSIGNMENTS / PROJECTS



PURPOSE:

- Apply transparent design principles to your contexts by focusing intensively on your examples.



TASKS:

- (me) facilitate
- (you) Pairs consider and revise assignments



CRITERIA: You'll leave with:

- Strategies for applying Transparency Framework to your contexts
- Intensive practice in using the TILT framework, shared insights
- Draft revisions to assignment or work project

Part 1)

- Say hello to your partner.
- Describe an assignment* **(2 min each)**

* “assignment” can be a staff work project

Part 2

2) TASK

Write a list of the actions you would take to do your colleague's assignment if you were a student.
(individually, 3 minutes)

3) PURPOSE

5 years later, what knowledge and skills do you still retain from doing your partner's assignment? Write a list.
(individually, 2m)

Part 4 (5 min per assignment)

4) Share your written lists with your partner: TASK, PURPOSE
Describe your thinking process.

***Do not coach or correct your partner when they talk about your assignment.**

Do revise as needed.

CRITERIA

5) As a student:

- Are you confident you are working effectively?
- Are you confident you're doing excellent work?
- Do you have multiple good examples?

6) Choose real-world examples to:

- illustrate CRITERIA
- check/demonstrate students' understanding

Reflection & Your Applications

- Insights
- Surprises
- Suggestions

Revise

- Write down how you would revise your assignment or project.

How Did We Do?



PURPOSE:

- Understand how transparent instruction improves student success
- Consider how you can use



TASKS:

- Research review
- Examples
- TILT your own materials



CRITERIA: You'll leave with

- Understanding of TILT and how it works
- Strategies, tools for applying TILT to your contexts
- Draft of a TILTed assignment or project

Resources

View Examples, Videos, Publications

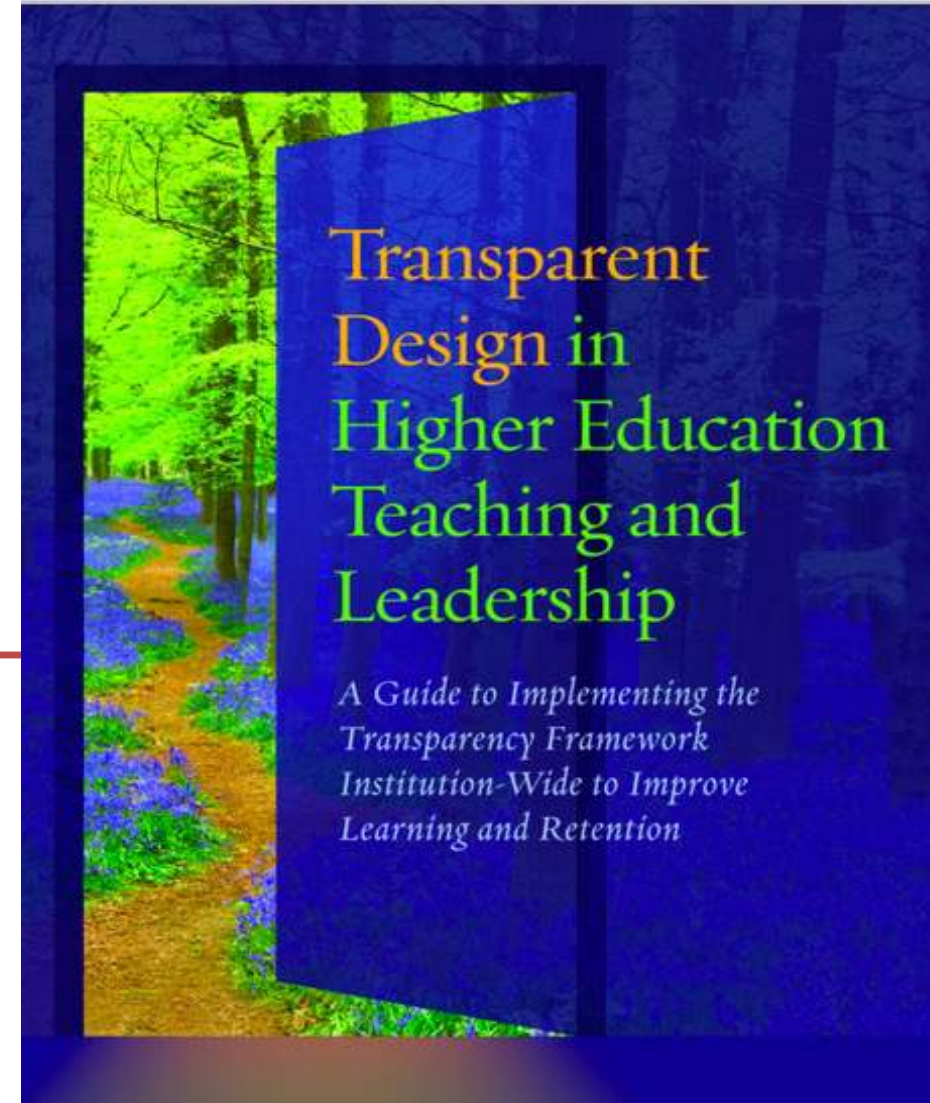
Sign up to use TILT Survey online

Join TILT Research Team

Arrange a Workshop

[TILTHigherEd.com](https://tilthighered.com)

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Facilitator's Notes

by Mary-Ann Winkelmes

CONTENTS

SLIDES

Notes that address questions faculty developers ask when they are preparing to offer a TILT-focused workshop.

FREQUENTLY ASKED QUESTIONS

Responses to questions often asked by TILT workshops participants.

SLIDES

Slide 2

This overview uses the 3-part Transparency in Learning and Teaching (TILT) Framework to frame the workshop.

Slide 5

Black, Hispanic, Native American and Pacific Islander students are just about half as likely to complete a four-year college degree as their White and Asian classmates (U.S. Department of Education January 2014). Completion rates for low-income students lag far behind those of students whose family incomes are above the bottom quartile (Tough 2014). And first generation college students are 51% less likely to graduate in four years than students whose parents completed college (Ishtani 2006).

Slide 6

This table summarizes responses to a question I ask faculty when I travel to campuses across the country:

- List 1 or 2 main challenges to students' successful completion of assignments in your courses

The responses usually identify 4 main categories of challenge. TILT can help directly to address three of the four: preparation, motivation, time management. Sometimes, TILT can help address challenges around access to resources by bringing those resources into the class meeting (i.e. research librarians, advisors, technology, time for downloads on the campus wifi system ...)



Slide 11

We found statistically significant gains (of small to medium magnitude) for all students who received more transparent instruction compared with students who received less transparent instruction. The gains were in 3 areas: 1) perceived skill development, 2) belonging, 3) confidence. Source: 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). (1 / 2), 31-36.

These gains are important based on what we know from other researchers who have connected increased confidence and increased belonging with higher grades and increased persistence. For example:

- Ethnically underrepresented (African-American) first-year college students who completed an exercise that aimed to increase their feelings of social belonging earned higher GPAs in the next three years, reduced the racial achievement gap, reduced their feelings of self-doubt, increased their confidence and were more likely to be in the top 25% of their college class (Walton, Gregory M., and Cohen, Geoffrey L.. (2011). "A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students." *Science* 331 (6023): pp. 1447-1451).
- In addition, struggling college students increased their test scores after endorsing the belief that intelligence is not fixed but rather malleable. One year later, these students were 80% less likely to drop out of college, and their GPAs continued increasing (Aronson, J., Fried, C. and Good, C. (2002). "Reducing the Effects of Stereotype Threat on African American College Students by Shaping Theories of Intelligence." *Journal of Experimental Social Psychology* 38: 113– 125.).
- For both white and African American first-year college students, sense of belonging can indirectly increase students' persistence behaviors (Hausmann, Leslie R., Ye, Feifei M., Schofield, Janet W., and Woods, Rochelle L. (2009). "Sense of Belonging and Persistence in White and African American First-Year Students. *Research in Higher Education* 50, 7: 649-669.) (Hart Research Associates. (2015). *Falling Short? College Learning and Career Success*. Washington, DC: AAC&U.) (Hart Research Associates. (2013). *It Takes More than a Major: Employer Priorities for College Learning and Student Success*. Washington, DC: AAC&U.)

Slide 12

The bar graph indicates statistically significant gains (of small to medium magnitude) for all students who received more transparent instruction compared with students who received less transparent instruction. The gains were in 3 areas: 1) perceived skill development, 2) belonging, 3) confidence. (Winkelmes, Mary-Ann, Matthew Bernacki, Jeffrey Butler, Michelle Zochowski, Jennifer Golanics, and Kathryn Harriss Weavil. (2016). "A Teaching Intervention that Increases Underserved College Students' Success." *Peer Review* 18 (1 / 2), 31-36.)



Slide 13

A baseline equivalence test determined there were no statistically significant differences at the beginning of the term between the students who would receive more transparent instruction and those who would receive less transparent instruction. (Winkelmes, Mary-Ann, Matthew Bernacki, Jeffrey Butler, Michelle Zochowski, Jennifer Golanics, and Kathryn Harriss Weavil. (2016). "A Teaching Intervention that Increases Underserved College Students' Success." *Peer Review* 18 (1 / 2), 31-36.)

Slide 14

TILT is an equitable teaching practice!
While the benefits for all students who received transparent instruction were statistically significant, the gains for underserved students were even greater (with effect sizes in the medium to large range).

Slide 15

Undergraduate students at the University of Las Vegas (UNLV) are among the very most diverse undergraduate student populations in the US. UNLV students who received more transparent instruction in their first year were nearly 14% more likely to remain enrolled in college 2 years later. (Sources: TILT Survey; UNLV Data Warehouse/Office of Decision Support, 10/23/2017 and 03/02/2018.)

Slides 16 - 17

The UNLV students who received more transparent instruction in a first year course were far more likely (in those transparent courses) to recognize the specific skills they were practicing and gaining in that course. (Sources: TILT Survey; UNLV Data Warehouse/Office of Decision Support, 10/23/2017 and 03/02/2018.)

Slide 18

A third study focusing on mainly 2-year colleges in the state of Washington system confirmed that Transparency predicts the gains identified in our earlier studies in the areas of :

- Academic confidence
- Sense of belonging
- Metacognitive awareness of skill development.

Slide 21

TILT can be applied at all levels of higher education: national, regional, statewide, consortia, institutions, programs, departments, courses, assignments. Purposes, Tasks and Criteria (the components of the 3-part Transparency Framework) can be scaled and aligned. The 2019 book publication contains chapters written by authors who describe using TILT in these contexts. (Winkelmes, M., Allison Boye and Suzanne Tapp, ed.s. (2019) *Transparent Design in Higher Education Teaching and Leadership*. Stylus Publishing.



Slides 26-28

In the original version of this assignment from an introductory Communications course, the purpose is hard to find. https://tilthighered.com/assets/pdffiles/Example_D.pdf. Participants will struggle and disagree about the main purpose of this assignment. There are too many skills involved for students to focus on practicing them all simultaneously. The most important 1 or 2 skills that course instructors wanted students to focus on are not evident. Participants will not be in total agreement about the most important skills. It's important to acknowledge that workshop participants have different interpretations about this assignment's purposes, tasks and criteria. When college instructors don't have a clear consensus about an assignment, how likely is it that the new incoming majority college student in the US will have a clear understanding of it?!

The assignment is not transparent, and does not allow all students a fair chance to succeed. It privileges the already-privileged students. Ask workshop participants to identify some of the ways the assignment privileges some students and disadvantages others.

The revised version of the assignment shows what it takes to transform an unclear and inequitable assignment into an assignment that is transparent enough to contribute to the higher retention gains we saw at UNLV. This assignment comes from one of those UNLV courses in the study. Ask workshop participants to compare the before and after versions. What remains mostly the same and what has been changed or added in the TILTed assignment? Many assignments are all about the task. Adding a purpose statement and a discussion with students about criteria makes a big difference to students' success. However, it is not adequate to merely tell students what the criteria are. The words on your checklist or rubric probably mean something to you that is very different from how students interpret them. (For example, "analyze" or "evaluate" in an art history course will look very different from "analyze" or "evaluate" in a Biology course.) To be confident that students understand what you mean, it's necessary to discuss several real world examples of work in the discipline and ask students to identify where (and how much) the work has met the criteria for the own upcoming work.

Workshop participants can usually identify how they could improve the "TILTed" (revised) Communications assignment to make it even more transparent, relevant, and accessible for students. Allowing time for them to do this is important. First, it demonstrates that adequate (but not complete) TILTING can make a big difference for students. This assignment was among those belonging to the UNLV retention study. Second, you can point out that participants' insights about how to improve the "TILTed" assignment are an indicator of their readiness to TILT more than enough to make a difference, and their readiness to TILT their own assignments or staff work projects.

Slides 30-39

In pairs or triads, participants will share written drafts or discuss rough ideas about an assignment (or staff work project) of their own. Arranging the groups to allow for cross-disciplinary interaction is helpful when you want participants to recognize the unspoken assumptions about a discipline that are contained in the draft assignment (and that are not



shared by students). Timing for this exercise can range from 45 minutes to several hours. The amount of time will determine how “rough” the revised draft (or new assignment) is. More time allows for more complete revisions that teachers can use with their students right away. You could repeat the process to TILT a second assignment.

To include staff who are not course instructors, ask them to apply the TILT Framework in this exercise to a work project of their own (like some authors explained in the 2019 [Transparent Design in Higher Education](#) book.

<https://styluspub.presswarehouse.com/browse/book/9781620368237/Transparent-Design-in-Higher-Education-Teaching-and-Leadership>)

VERY IMPORTANT: Remind participants that they are walking away with *more* transparent designs, but those designs might not be *fully* transparent to their students. Even if this term’s students think an assignment is transparent, next term’s students might understand it differently.

The only way to be certain that an assignment is transparent to a specific group of students is to ask students to parse it during a class discussion. The “Unwritten Rules” TILT Template for Students is designed for this purpose.

[https://tilthighered.com/assets/pdffiles/Transparent Assignment Template for](https://tilthighered.com/assets/pdffiles/Transparent%20Assignment%20Template%20for%20Students%20v2.pdf)

[Students v2.pdf](https://tilthighered.com/assets/pdffiles/Transparent%20Assignment%20Template%20for%20Students%20v2.pdf) **This should happen *before students start working on the assignment.***

Students will show you ways to make your assignment more transparent for them. This is how you will know that students are equally ready to work on the assignment. The discussion will save you time and trouble. In addition, students will gain practice in parsing assignments – a skill that will help them with assignments throughout college and with work projects after college.

FREQUENTLY ASKED QUESTIONS

Will students still benefit if my transparent assignments don’t follow the Transparent Assignment Template exactly?

Yes! The Template helped to frame a conversation between teachers and students in our study. We used it as a guide to help teachers and students think together — either online or in the classroom — about the purposes, tasks and criteria for academic work. Use it as a guide. As long as your communication with students results in their clear understanding of the purposes, tasks and criteria for their work before they start working, you can expect to see the kind of learning benefits we found in our study.

What if I don’t want to give students information about how to do the work because my goal is for the students to figure out how to do it on their own?

Some faculty in our studies wanted to avoid limiting students’ creativity by providing recommended procedures for approaching or completing the work. Faculty in Performing Arts and Engineering disciplines, for example, may sometimes want to students to invent new processes and methods. In such cases, faculty can preserve students’ confidence and sense of



belonging by adapting the way they explain the purpose of the assignment. For example: “The purpose of this assignment is for you to struggle and feel confused while you invent your own process and methods for addressing the problem...”

How will I know if I’m offering transparent instruction exactly like teachers in your studies did?

If you incorporate transparent instruction at your own discretion, then you’ll be doing what the teachers in our studies did. We asked teachers to offer transparency around the purposes, tasks and criteria for academic work in their courses in their own way at their own discretion. We offered Transparent Assignment Templates (for teachers and for students) and a small amount of training via onsite and online workshops. We intentionally avoided rigid protocols for how to adopt transparency in your instruction for two main reasons: 1) we expected variation; and 2) we wanted to demonstrate what teachers in a variety of higher education contexts around the country could expect if they adopted Transparent Assignment Design at their own discretion with the goal of improving students’ learning and increasing equitable opportunities for all students to succeed.

Is there variation in the effectiveness of Transparent Assignment Design across disciplines or levels of expertise?

Transparent instruction seems to benefit students across the disciplines and at all levels of expertise. The benefits for students in our studies were statistically significant, and the gains for underserved students were larger (with effect sizes in the medium to large range). The gains are in three areas: 1) perceived skill development, 2) belonging, 3) confidence. (Winkelmes, Mary-Ann, Matthew Bernacki, Jeffrey Butler, Michelle Zochowski, Jennifer Golanics, and Kathryn Harriss Weavil. (2016). “A Teaching Intervention that Increases Underserved College Students’ Success.” *Peer Review* 18 (1 / 2), 31-36.) There were greater benefits (medium to large in magnitude) for underserved students (first-generation, ethnically underrepresented, low-income).

The variations weren’t always what we expected. For example, students in STEM courses felt the courses helped them improve their writing skills significantly, while students in large courses felt strongly that their instructors valued them and their interests. We expected some of the greatest potential long-term benefits (on retention and graduate rates) would come from offering Transparent Assignment Design in introductory and intermediate-level courses, so we focused our main efforts there first. We saw higher retention rates into the third year of college for students who received transparent instruction in at least one course in their first year of college.

Is there live online help or a self-guided online tutorial I can use?

A self-guided draft checklist is available, as well as a rubric that measures the amount of transparency in an assignment. (Palmer, Michael S., Gravett, Emily O., LaFleur, Jennifer. (2018). *Measuring Transparency: A Learning-Focused Assignment Rubric. To Improve the Academy* 37 (2), 173-187.)



Also check the videos, example assignments and resources on the TILT [Examples and Resources webpage](#).

What other ways can I offer transparent instruction, in addition to assignment design?

We are testing the impact of various ways of offering transparent instruction. We focused heavily on Transparent Assignment Design at the introductory and intermediate college levels, because we expected that would have the biggest possible benefit on college students' retention and graduation rates, and their continued success in careers and/or post-graduate study. Read about the impact of other types of transparent instruction in the "Talking About Transparent Instruction" and "Publications" sections on the TILT Examples and Resources webpage.

I'm interested in joining TILT Higher Ed and contributing to your research on equitable opportunities for all college students' success.

We welcome your participation. There are several ways to get involved:

1. [Sign up to join the project as an individual instructor](#), use the TILT Surveys and receive a confidential instructor's report on your students' learning;
2. Organize a group of faculty/instructors from your institution who share a common institutional goal, and join TILT Higher Ed as a team.
3. Send your own examples and suggestions that you'd like to share on the TILT website to wink@tilthighered.com
4. Inquire about joining our team of researchers if you'd like to help us study the data we are gathering, and contribute to co-publications.
5. Arrange a workshop for your institution, consortium, or conference.

Please contact Mary-Ann Winkelmes (wink@tilthighered.com) with additional questions or suggestions.