

Transparent Assignments Enhance Students' Success

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Keynote Session:

Data from a 2014-2015 AAC&U study of students' learning at seven Minority-Serving Institutions indicates that transparency in assignments boosts students' success (and especially underserved students' success) significantly in three important areas: academic confidence, sense of belonging, and mastery of the skills employers value most when hiring (Winkelmes et al., [Peer Review](#), Spring 2016). In this session, we'll review the findings about how transparent assignment design promotes students' success equitably. Participants will examine several examples of what transparency looks like when applied to course assignments. Breakout sessions will explore specific ways to implement transparency in your contexts to improve students' success

Breakout Sessions:

- 1. Teachers, students, instructional designers:** Creating Transparent Assignments to promote equitable opportunities for all students to succeed (Melissa Bowles-Terry)
 - How can we explicate the purposes, tasks and criteria for assignments in ways that are equally accessible to all students? (Whole group activity; pairs activity)
 - Instructors leave with a draft assignment that is transparently designed.
 - Designers leave with insights for helping instructors design transparent assignments
- 2. Unit / Department leaders & Administrators:** Using a Transparency Framework to enhance collaboration within / between units and at the institution/consortium level
 - Identify a commonly shared challenge to collaboration or implementation in your context (in groups)
 - Use the Transparency Framework to map out a strategy that may help
 - Report back: Whole group identifies best ideas. Facilitators share ideas from their campus.

Please join us!

www.unlv.edu/provost/teachingandlearning

- **Contribute** to our ongoing research
- **Sign up** to survey your students, receive a confidential report
- **Discuss:** Transparent 2nd Tuesdays at 2:00 pm

Recent Findings: Transparency in Learning and Teaching in Higher Education

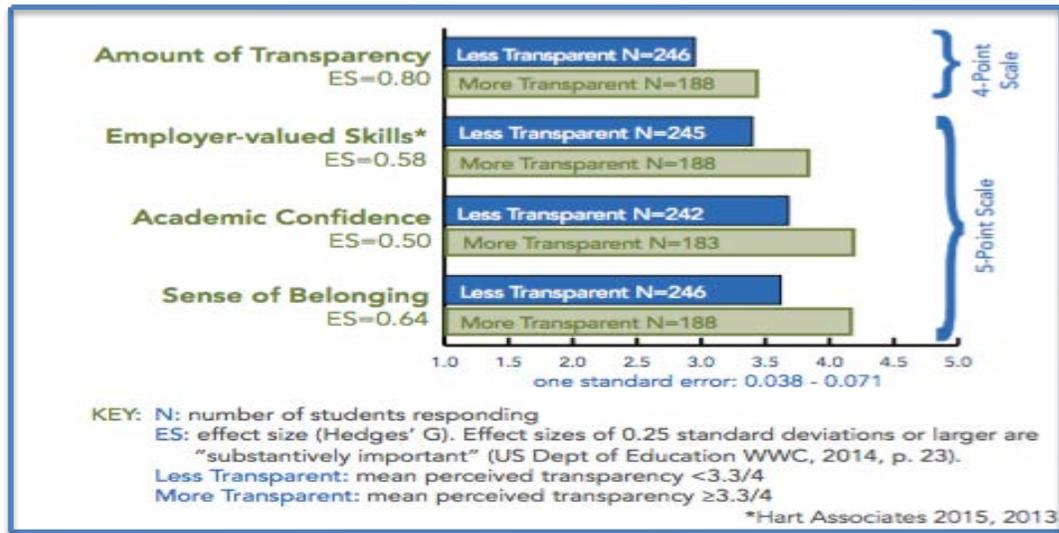
A 2015 study (Winkelmes, et al., [Peer Review](#), Winter 2016) identified transparent teaching about problem-centered learning as an easily replicable teaching method that produces learning benefits already linked with students' success. This simple, replicable teaching intervention demonstrably enhanced 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](#)).

Subsequent tracking of 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 as seen in retention rates. UNLV intro-level students who received more transparency around their academic assignments had significantly higher average retention/re-enrollment rate than the average freshman-to-sophomore retention rate for UNLV's first-time, full-time freshmen, while retention gains for underserved students were often greater (Gianoutsos and Winkelmes 2016).

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 College Students



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



Transparent Assignment Template for Students

The Unwritten Rules: Decode Your Assignments and Decipher What's Expected of You

Breaking News

The [Transparency in Learning and Teaching in Higher Education Project](#) at UNLV demonstrated in a national study that transparency around academic assignments enhances students' success -- especially that of first-generation, low-income and underrepresented college students -- at statistically significant levels (with a medium-to-large sized magnitude of effect for underserved students). **Students who understand the purpose, tasks and criteria of an academic assignment** before they begin to work on it (in comparison with students who don't share that understanding) **experience higher academic confidence, an increased sense of belonging, and greater awareness that they are mastering the skills that employers value, as well as higher rates of returning to college the following year.** (Winkelmes et al., *Peer Review* 2016; Gianoutsos and Winkelmes, *PADE Proceedings* 2016).

Background

Researchers have demonstrated that increases in college **students' academic confidence and sense of belonging are linked with higher GPAs, persistence and retention** rates, especially for underserved students (Walton and Cohen 2011). In addition, struggling college students increased their test scores after endorsing the belief that **intelligence is not fixed but rather malleable.** A year later, these students were 80% less likely to drop out of college (Aronson et al 2002).

WHAT STUDENTS CAN DO:

Before you begin working on an assignment or class activity, ask the instructor to help you understand the following. (Bring this document to help frame the conversation.)

Purpose

- Skills you'll practice by doing this assignment
- Content knowledge you'll gain from doing this assignment
- How you can use these in your life beyond the context of this course, in and beyond college

Task

- What to do
- How to do it (Are there recommended steps? What roadblocks/mistakes should you avoid?)

Criteria

- **Checklist** (Are you on the right track? How to know you're doing what's expected?)
- **Annotated examples of successful work**
(What's good about these examples? Use the checklist to identify the successful parts.)

Aronson, J., Fried, C., & Good, C. "Reducing the effects of stereotype threat on African American college students by shaping theories of intelligence." *Journal of Experimental Social Psychology* 38 (2002): 113-125.

Gianoutsos, Daniel and Mary-Ann Winkelmes. "Navigating with Transparency." *Proceedings of the Pennsylvania Association of Developmental Educators* (Spring, 2016).

Walton, G. M., & Cohen, G. L.. "A brief social-belonging intervention improves academic and health outcomes among minority students." *Science* 331 (2011): 1447-51.

Winkelmes, Mary-Ann, Matthew Bernacki, Jeffrey Butler, Michelle Zochowski, Jennifer Golanics, Kati Harriss Weavil. "A Teaching Intervention that Increases Underserved College Students' Success." *Peer Review* (Winter/Spring 2016).

<http://www.unlv.edu/provost/teachingandlearning>
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Transparent Assignment Template for Faculty

Transparent Assignment Template

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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. Ideally, 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.

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* (Winter/Spring 2016).

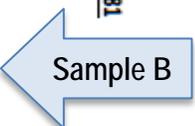
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Examples: LESS Transparent Assignments



1. Select a professional in your prospective academic discipline and/or career field that is considered an expert in an area in which you are interested.
2. Secure an interview with the professional for a date and time that is convenient for both of you.
3. Prepare 8-10 questions to ask the professional about their knowledge of a particular academic discipline/career field.
4. Conduct a 20-30 minute, face-to-face interview to gather knowledge that will help you make an informed decision about the major/career you are considering. You will want to audio/video record the interview with the interviewee's permission
5. Prepare a typed transcript of the questions and answers using the audio/video recording.
6. Write a 400-500 word reflection paper in which you address the following items:
 - a. Who you selected and why?
 - b. What you learned from them that is most interesting?
 - c. What this assignment helped you learn about your major/career decision?
 - d. What questions you still have?
7. Submit the typed transcript and reflection paper to your instructor.



MATH 181

For the given function $y(x) = x^{5/3} - 3x^{2/3}$

Find and simplify the first derivative

Identify any critical points

Find and simplify the 2nd derivative

Identify any inflection points

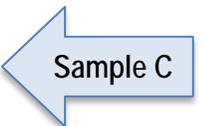
Indicate where the function is increasing/decreasing, concave up/down (i.e. Make a sign diagram)

Make a rough sketch of the shape of the graph, and label the critical points and inflection points (x value only)



Examples: MORE Transparent Assignments

COLA100E Interview Assignment, UNLV
Katharine Johnson



Due dates:

- Draft interview questions – September 30, 2014
- Transcript of interviews – October 15, 2014
- Report - November 17, 2014

Purpose: The purpose of this assignment is to help you make an informed decision about the major/career you are considering.

Skills: The purpose of this assignment is to help you practice the following skills that are essential to your success in school and your professional life beyond school. In this assignment you will:

- Access and collect needed information from appropriate primary and secondary sources.
- Synthesize information to develop informed views.
- Compose a well-organized, clear, concise, report to expand your knowledge on a subject in your major.

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

- Issues facing professionals in a field
- Scholarly research formats for documenting in-text sources and creating reference pages (i.e., bibliographies).

Task: To complete this assignment you should:

1. Select two professionals in your prospective academic discipline and/or career field that are considered experts in an area in which you are interested.
2. Secure an interview with the professionals for a date and time that is convenient for both of you.
3. Prepare 8-10 questions to ask the professionals about their expertise in a particular academic discipline/career field. The questions must be based on a review of the field using 5 credible sources as defined by the librarian in our research module. Sources should be cited using APA formatting.
4. Conduct a 20 – 30 minute, face-to-face interview with each professional to gather knowledge that will help you make an informed decision about the major/career you are considering. You will want to audio/video record the interview with the interviewee's permission.
5. Prepare a typed transcript of the interviews
6. Compare and contrast the information provided by both professionals in an **8 page (1.5 spaced, 12 point Times New Roman font, 1 inch margins) report** that documents the advantages and disadvantages of a career in the selected field.

Criteria for success: Please see the attached rubric.

Science 101
Exercise 3: Scientific Evidence



Alison Sloat

Purpose: The purpose of this assignment is to analyze a past poster to help you research, design, and create your own effective poster with sufficient scientific evidence that supports your conclusion.

Skills/Knowledge: As a result of completing this assignment, you will be able to identify and judge the success of the important parts of a scientific poster.

the sources of scientific information, the interpretation of the results, and the scientific merit of the conclusion.

Task: Read through your example scientific poster and answer the following questions. You will be graded based on how completely you address the following:

1. Identify the ethical question that is being asked.
2. List the evidence the authors provide in support of and in opposition of their question.
3. Examine the pieces of evidence listed in #2 above. Identify whether they are from popular (Pop), scientific peer-reviewed (SPR), or non-scientific peer-reviewed (NSPR) sources, and note each statement above as (Pop), (SPR), or (NSPR). Do you think there is enough scientific evidence from peer-reviewed articles? Why or why not?
4. Describe how the pieces of evidence are presented (e.g., numbers, graphs, tables, figures).
5. Explain how the pieces of evidence are analyzed in the Discussion section.
6. Identify the ethical conclusion.
7. After analyzing the content of the poster, do the pieces of evidence support their conclusion? Explain why or why not.
8. After assessing the scientific merit of their evidence, are you convinced of their ethical conclusion? Explain why or why not.
9. List the questions you still have after reading this poster. What could they have done better?

Criteria for success:

Your responses should be as complete as possible. After completing this assignment, you will have increased your understanding of how to identify the essential parts of a scientific poster and how to evaluate its use of evidence.





