Expanding Inclusive Teaching Practices: What’s Needed?

Mary-Ann Winkelmes

How can we maximize our efforts to implement transparency and other inclusive teaching/learning practices? In this session, we explore this question three ways:

1. a question/answer interaction to follow up our first workshop,
2. a look at new impact data on the success of underserved students who received transparent instruction, and
3. a discussion about what resources would be needed in order to:
   • implement transparent instruction on your own;
   • encourage inclusive teaching practices more broadly at your institution
   • expand inclusive teaching practices across networks of institutions.

Some resources to support your implementation:

1. Research Summary and Bibliography
2. Examples of Less vs. More Transparent Assignments
3. Transparent Assignment Templates for Students and Faculty
4. Discussion Questions: Strategies for best impact in your contexts
5. DRAFT Checklist for Transparent Assignment Design
6. Transparent Tuesdays invitation
1. 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 an average retention/re-enrollment rate 14% higher 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

![Graph showing the comparison of first generation college students' end of term performance between less and more transparent courses.](chart.jpg)

<table>
<thead>
<tr>
<th>Amount of Transparency</th>
<th>Employer-valued Skills*</th>
<th>Academic Confidence</th>
<th>Sense of Belonging</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ES=0.80</strong></td>
<td><strong>ES=0.58</strong></td>
<td><strong>ES=0.50</strong></td>
<td><strong>ES=0.64</strong></td>
</tr>
<tr>
<td>Less Transparent</td>
<td>More Transparent</td>
<td>More Transparent</td>
<td>More Transparent</td>
</tr>
<tr>
<td>N=248</td>
<td>N=188</td>
<td>N=168</td>
<td>N=188</td>
</tr>
<tr>
<td>4.3%</td>
<td>5.3%</td>
<td>5.5%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>

**N**: number of students responding

Less Transparent: mean perceived transparency < 3.3/4

More Transparent: mean ≥ 3.3/4

* Effect size of 0.25 standard deviations or larger are "substantively important." (US Dept of Ed, What Works Clearinghouse Procedures and Standards Handbook version 3.0, Web, March, 2014, p. 23.)

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

© 2015 Mary-Ann Winkelmes, Principal Investigator
mary-ann.winkelmes@unlv.edu
Bibliography:


Elbow, Peter. “High Stakes and Low Stakes in Assigning and Responding to Writing.” New Directions for Teaching and Learning, no. 69, (Spring 1997).


Tanner, Kimberly B. “Promoting Student Metacognition.” CBE Life Sciences Education 11, 2 (June 4, 2012): 113-120.


2. EXAMPLES: Less Transparent

7. Submit the typed transcript and reflection paper to your instructor.
   a. Who you selected and why?
   b. What questions you still have?
   c. What this assignment helped you learn about your major/career decision?
   d. What do you expect to learn from them that was most interesting?

6. Write a 400-500 word reflection paper in which you address the following items:
   a. What is your major/career field that is considered an expert in an area in which you are interested.
   b. What 8-10 questions to ask the professional about their knowledge of a particular academic discipline/career field.
   c. Why did you select them?
   d. What did you learn from them that was most interesting?

5. Prepare a typed transcript of the questions and answers using the audio/video recording.
   a. 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.

4. Identify any critical points and inflection points.
   a. How do I find and simplify the first derivative?
   b. How do I find and simplify the second derivative?

3. Identify any critical points and find a rough sketch of the shape of the graph, and label the critical points and infection points.
   a. How do I make a sign diagram where the function is increasing/decreasing, concave up/down? Make a sign diagram.

For the given function:
   \( f(x) = x^3 - 3x^2 \)
2. EXAMPLES: More Transparent

Sample C

Criteria for success:
- 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.

Sample D

Purpose:
The purpose of this assignment is to provide feedback on your understanding of the scientific method and the importance of critical thinking in scientific inquiry.

Task:
- Read through your example scientific poster and answer the following questions:
  1. What is the purpose of the study?
  2. What is the research question?
  3. What is the hypothesis?
  4. What is the experimental design?
  5. What are the results?
  6. What is the conclusion?
  7. What is the significance of the results?

You will be graded based on how completely you address the following:
- Knowledge of the scientific method
- Critical thinking skills
- Ability to evaluate scientific evidence

Additional resources:
- The Scientific Method: A Guide to Inquiry and Experimentation
- Understanding the Scientific Method

Mary-Ann Winkelmes, Principal Investigator
mary-ann.winkelmes@unlv.edu

UNIVERSITY OF NEVADA, LAS VEGAS

http://www.unlv.edu/provost/teachingandlearning
3. Transparent Assignment Templates for Students and Faculty

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.)


http://www.unlv.edu/provost/teachingandlearning
mary-ann.winkelmes@unlv.edu

© 2014 Mary-Ann Winkelmes, Principal Investigator
WHAT FACULTY CAN DO:

Transparent Assignment Template
© 2013 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. 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.

---


http://www.unlv.edu/provost/teachingandlearning
mary-ann.winkelmes@unlv.edu
4. Discussion Questions: Strategies for best impact in your contexts

*TILT* Higher Ed aims to promote college students’ success equitably in the U.S. and beyond. To that end, it supports instructors and faculty in adopting a transparent teaching framework at their own discretion in ways that suit their contexts. The questions below provide possible ways to focus conversations about strategies for adopting inclusive teaching practices in a variety of your own contexts.

What kinds of broad networks would help us achieve the greatest impact on underserved students?
- Community College
- Liberal Arts
- Research Intensive
- Regional
- Teaching/Learning Centers at colleges/universities (POD Network)
- STEM Education Centers at colleges/universities (NSEC)
- Disciplinary professional organizations (conferences, proceedings)

What specific goals at your institution might benefit from an inclusive teaching initiative?
- Retention rates
- Graduation rates
- Increased diversity of students, and/or faculty and staff
- Increased student satisfaction, faculty/staff satisfaction
- Community engagement
- Research productivity
- Scholarship of teaching and learning

What kinds of courses would help us achieve the greatest impact on underserved students?
- Introductory (large, small)
- Freshman seminars
- Remedial/bridge
- Courses with high percentages of D/W/F grades
- Gateway courses for a major
- Pathways through a major
- General education

What kinds of campus units might make strong partners in an inclusive teaching initiative?
- Academic advising
- Tutoring
- Library
- Registrar
- Community engagement and diversity
- Online education
- Continuing education
- Campus recreation
5. DRAFT Checklist for Designing a Transparent Assignment

PURPOSE:
Thank you for helping to test this DRAFT checklist. Please send your suggestions and feedback to mary-ann.winkelmes@unlv.edu

Skills
- Does your purpose statement specify content knowledge that students will gain from doing this assignment?
- Does your purpose statement link that particular knowledge to the larger context of:
  - recent topics of class sessions?
  - this part of the course?
  - the whole course?
  - the major?
  - the discipline?
  - your institution’s main learning outcomes?
- Does your purpose statement indicate the relevance and/or usefulness of this knowledge to the students’ lives:
  - beyond the course? beyond the major? beyond college?

Knowledge
- Does your purpose statement specify a skill or skill set that students will practice while doing the assignment?
- Does your purpose statement link that particular skill/skill set to examples/contexts where this skill was important in the context of:
  - recent class sessions?
  - this part of the course?
  - the whole course?
  - the major?
  - the discipline?
  - your institution’s main learning outcomes?
- Does your statement indicate the relevance and/or usefulness of this knowledge to the students’ lives:
  - beyond the course? beyond the major? beyond college?

  Would this assignment benefit from segmenting it into several assignments, each one focused on a discrete set of skills that should be mastered to insure students’ successful completion of the next assignment in the sequence?

TASK:
- Does your description of the task:
  - Identify the very first thing students should do when they begin working on the assignment?
  - The very next thing they should do?
  - The next, etc.
- Does your description of the task help students to avoid wasting their time on unnecessary steps, unproductive time expenditure?
- Does your description help students to focus their time efficiently on producing the highest quality work possible in the time given?
- Would students benefit from some practice exercises (in the form of a pre-task) in class to prepare them to perform the task outside of class on the graded assignment?

CRITERIA:
- Can students use the criteria while they are working on the assignment to determine whether they are completing the assignment efficiently and effectively?
- Do the criteria take the form of a checklist students can use to evaluate the quality of their efforts while they are working on the assignment?
- Does the checklist specify characteristics of high quality work for this assignment?
- Can you help students apply the checklist to evaluating some sample work in class, so they understand how each criterion would look in practice?
- With your guidance, can the students collaboratively annotate several examples of work to indicate where/how the work satisfies the criteria? (These annotated examples may then be shared as a reference for students to use while they work on their own assignments.)
- Would a rubric (AAC&U VALUE examples) be helpful to students for this assignment?
- Does the rubric provide an amount of information that helps students at this phase in their learning?
- Does the rubric provide an overwhelming or counterproductive amount of information for students at this phase in their learning?
- Did you provide examples of good work, annotated to identify exactly where and how this work satisfies your criteria?
- Can you provide students with examples in class so they and you can test out your criteria checklist or rubric to be sure students know how to apply the criteria to multiple examples of work, and eventually their own work?
6. Transparent Tuesdays invitation

**Transparent 2nd Tuesdays at 2:00 pm (your time zone)**

A transparent teaching framework can equitably promote all college students’ success. Recent research indicates that transparently designed assignments benefit college students’ learning significantly – especially that of underserved students (Winklemes et. al. Peer Review, Winter/Spring 2016). Here’s a Transparent Assignment Template, along with some examples of assignments before and after using the template: (Example A, Example B, Example C, Example D).

Get some feedback on making your own assignments more transparent. Upload any assignments you’d like to discuss with colleagues into this folder and connect here the 2nd Tuesday of each month.

I look forward to our conversation.

Sincerely,

Mary-Ann Winklemes, Ph.D.
Coordinator of Instructional Development and Research; Associate Graduate Faculty, History Department
Office of the Provost
University of Nevada, Las Vegas
4505 S. Maryland Parkway, Mail Code 1014
Las Vegas, NV 89154-1014
Email: Mary-Ann.Winklemes@unlv.edu
Phone: (702) 895-4332 Fax: 702-895-3455 Office: FDN 421
Senior Fellow, Association of American Colleges & Universities
Nevada Humanities Board of Trustees Member
Principal Investigator, Transparency in Learning and Teaching Project

mary-ann.winklemes@unlv.edu