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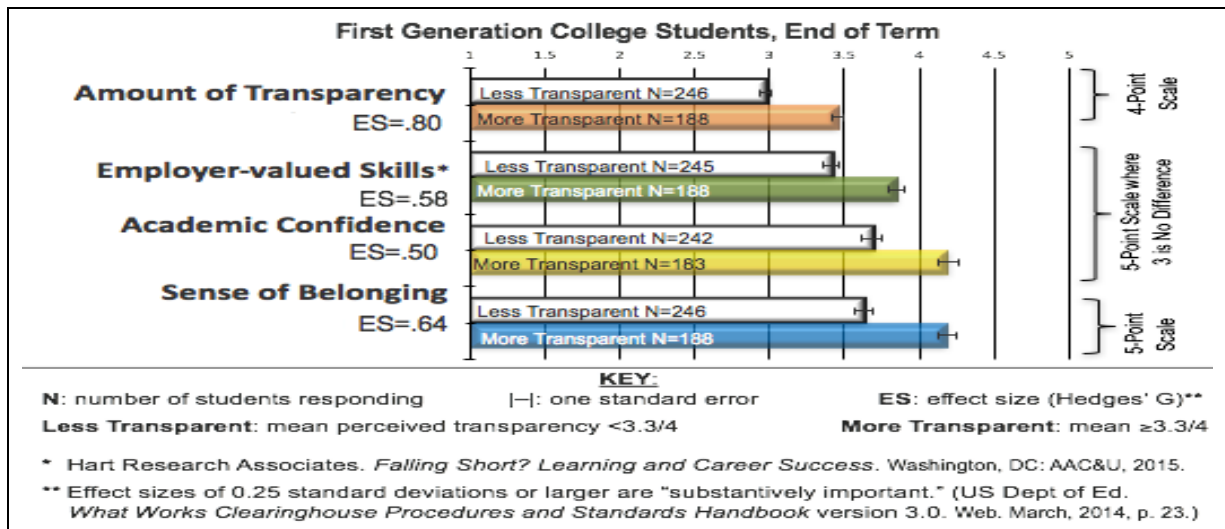
Publications and information about the Transparency in Learning and Teaching Project are at: **www.unlv.edu/provost/teachingandlearning**

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2. EXAMPLES: Less Transparent

Sample A

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 filed.

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.

Sample B
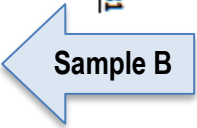
MATH 181

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 (Ie. 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)

2. EXAMPLES: More Transparent

Sample C

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.

Sample D

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 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.

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.)

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

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WHAT FACULTY CAN DO:

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/perfom. "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.

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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 greates impact on underserved students?
- Community College
- Liberal Arts
- Research Intensive
- Regional
- Teaching/Learning Cetners at colleges/univeristies (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
- o Does your purpose statement specify content knowledge that students will gain from doing this assignment?
- o 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?
- o 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
- o Does your purpose statement specify a skill or skill set that students will practice while doing the assignment?
- o 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?
- o 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:
- o 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.
- o Does your description of the task help students to avoid wasting their time on unnecessary steps, unproductive time expenditure?
- o Does your description help students to focus their time efficiently on producing the highest quality work possible in the time given?
- o 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:
- o Can students use the criteria while they are working on the assignment to determine whether they are completing the assignment efficiently and effectively?
- o 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?
- o Does the checklist specify characteristics of high quality work for this assignment?
- o Can you help students apply the checklist to evaluating some sample work in class, so they understand how each criterion would look in practice?
- o 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.)
- o Would a rubric (AAC&U VALUE examples) be helpful to students for this assignment?
- o Does the rubric provide an amount of information that helps students at this phase in their learning?
- o Does the rubric provide an overwhelming or counterproductive amount of information for students at this phase in their learning?
- o Did you provide examples of good work, annotated to identify exactly where and how this work satisfies your criteria?
- o Can you provide students with examples in class so they and you can test outyour 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 (Winkelmes 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 Winkelmes, Ph.D.
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