TRANSPARENT ASSIGNMENT DESIGN ENHANCES STUDENTS' SUCCESS

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Founder and Principal
• Partnership with

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• Co-PIs: Tia Brown McNair, Ashley Finley, AAC&U

• Schools:
  – Community College of Philadelphia
  – Queensborough Community College, Bayside, NY
  – St Edward's Univ. Austin, TX
  – Univ. of Houston – Downtown, TX
  – California State University, LA
  – Winston-Salem State University, NC
  – Heritage University, Toppenish, WA

• Publication: *Peer Review* (Spring 2016)
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Overview

PURPOSE:
– Understand how transparently designed assignments can offer equitable opportunities for all college students to succeed; and consider applications

TASKS:
– Review: summary of research findings
– Apply: in your own courses

CRITERIA:
You’ll leave with
– Understanding of our research
– Strategies (draft) for applying transparency in assignments
CONTEXT
Equity of Access ≠ Equity of Experience

Underrep, First Gen, Low Income: half as likely to complete in 4 years

High-achievement in HS can frustrate college success

Gatekeepers stunt research

Well-prepared novices don’t think like experts
<table>
<thead>
<tr>
<th>Your challenges</th>
<th>Your strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lack of Preparation</strong></td>
<td>• In-class peer and individual work on assignments</td>
</tr>
<tr>
<td>• Don’t have critical thinking / writing / research skills needed to do the assignment</td>
<td>• Evaluate examples of good work in class</td>
</tr>
<tr>
<td>• Don’t know what good scholarship looks like</td>
<td>• Review instructions in class</td>
</tr>
<tr>
<td>• Don’t understand the instructions</td>
<td>• Break assignment into smaller pieces with feedback after each due date</td>
</tr>
<tr>
<td>• No experience doing this kind of project</td>
<td>• Explain how to do each step</td>
</tr>
<tr>
<td></td>
<td>• Students use my checklist to evaluate work</td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
<td>• Practice skills in class</td>
</tr>
<tr>
<td>• Lack of confidence</td>
<td>• Begin working on assignment in class</td>
</tr>
<tr>
<td>• Fear of failure</td>
<td>• Discuss benefits of assignment to their learning; relevance to this class, their life</td>
</tr>
<tr>
<td></td>
<td>• Offer feedback on each piece of project</td>
</tr>
<tr>
<td><strong>Time Management</strong></td>
<td>• Provide time estimates for each step of the project</td>
</tr>
<tr>
<td>• Procrastination</td>
<td>• Offer feedback on drafts</td>
</tr>
<tr>
<td>• Competing responsibilities</td>
<td>• Early due dates for small pieces of project</td>
</tr>
</tbody>
</table>
What is Transparency?

• Transparent teaching and learning methods explicitly focus on *how* and *why* students are learning course content in particular ways.
How can Transparency help students?

- Transparent teaching/learning methods benefit students who are unfamiliar with college success strategies by explicating learning/teaching processes.
  - Greater benefits for underrepresented and first-generation students

Winkelmes, AAC&U's *Liberal Education* 99, 2 (Spring 2013)
Transparency and Problem-centered Learning

AAC&U and Transparency Project collaboration

- 7 MSIs, 1800 students, 35 faculty
  - 425 First generation students
  - 402 non-white students
  - 479 low-income students
  - 297 multiracial students

- 2 x simple teaching intervention (2 assignments)

- Boosted students’ learning in 3 important ways (medium-large effect for underserved students):
  - Academic confidence
  - Sense of belonging
  - Skills valued most by employers

Increased GPA, retention
KEY: N: number of students responding

|—|: one standard error

ES: effect size (Hedges’ G) Effect sizes of 0.25 standard deviations or larger are “substantively important” (US Dept of Education WWC, 2014, p. 23).

**Less Transparent:** mean perceived transparency < 3.3/4

**More Transparent:** mean ≥ 3.3/4


Baseline Equivalence, Beginning of Term
All Disciplines, All Students

Confidence to Succeed

Please rate your confidence about your ability to succeed in this field.

Please rate your confidence about your ability to succeed in school.

Skills Highly Valued by Employers*

I am capable of learning effectively on my own.

I tend to consider the ethical implications of my actions.

I am able to apply the things I have learned to new problems and situations.

When I get information from multiple sources, I have an easy time making connections between them.

I am good at breaking down theories, ideas, and experiences into pieces so I can consider them.

I collaborate well with others on academic work.

I can communicate effectively when I speak.

I can express my ideas effectively when I write.

---

More Transparent Courses (N=485)  Less Transparent Courses (N=630)
First Generation College Students, End of Term

Amount of Transparency
- Less Transparent N=246
- More Transparent N=188
- ES=.80

Employer-valued Skills*
- Less Transparent N=245
- More Transparent N=188
- ES=.58

Academic Confidence
- Less Transparent N=242
- More Transparent N=183
- ES=.50

Sense of Belonging
- Less Transparent N=246
- More Transparent N=188
- ES=.64

KEY:
- N: number of students responding
- ES: effect size (Hedges’ G) Effect sizes of 0.25 standard deviations or larger are “substantively important” (US Dept of Education WWC, 2014, p. 23).
- Less Transparent: mean perceived transparency < 3.3/4
- More Transparent: mean ≥ 3.3/4

What does Transparent Assignment Design look like?

Faculty/Instructors agreed (in national study) to discuss with students in advance:

• Purpose
  • What Skills will students practice?  importance
  • What Knowledge will students gain?

• Task
  • What students will do
  • How to do it

• Criteria for success
  • What excellence looks like (annotated examples)
  • Criteria in advance so students can self-evaluate

Winkelmanes et al, AAC&U’s Peer Review (Winter, 2016)
<table>
<thead>
<tr>
<th>Research on Learning</th>
<th>Implications for Transparent Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elbow, Jaschik/Davidson, Mazur Ambrose, Bergstahler Gregorc, Kolb</td>
<td>Low stakes for greater creativity / risk</td>
</tr>
<tr>
<td></td>
<td>Varied and/or flexible formats appeal equitably to students’ strengths; inclusive</td>
</tr>
<tr>
<td>Bass, Bloom, Colomb, Felder, Perry</td>
<td>Build critical thinking skills in intentional sequence.</td>
</tr>
<tr>
<td></td>
<td>Target feedback to phase, don’t overwhelm</td>
</tr>
<tr>
<td>Doyle, Felder, Tanner, Winkelmes</td>
<td>Specify pertinent knowledge/skills, criteria and encourage self-monitoring.</td>
</tr>
<tr>
<td>Fisk/Light, Tanner</td>
<td>Provide annotated examples of successful work w/ criteria applied, before students begin work.</td>
</tr>
<tr>
<td>Aronson, Dweck, Fisk, Light, Schnabel, Spitzer, Steele, Treisman, Yeager/Walton, Vygosky</td>
<td>Structure and require peer instruction, feedback; positive attribution activities.</td>
</tr>
<tr>
<td>AAC&amp;U Finley/McNair (HIP, P-B) Winkelmes et al</td>
<td>Explicate purposes, tasks, criteria in advance.</td>
</tr>
<tr>
<td>Yeager, Walton</td>
<td>Give students a compass, set expectations; Explicate applicability, relevance; Engage students in</td>
</tr>
<tr>
<td></td>
<td>applying shared criteria to increase belonging.</td>
</tr>
</tbody>
</table>
Apply all that research to designing transparent, equitable assignments!
Sample Assignments

**Purpose**

- Skills practiced \( \rightarrow \) relevance to students
- Knowledge gained \( \rightarrow \) connection to LOs

**Task:** What to do

How to do it

**Criteria**

- What excellence looks like (annotated)
- Criteria in advance to help students to self-evaluate
Sample Assignments

Purpose
• Skills practiced  relevance to students
• Knowledge gained  connection to LOs

Task: What to do
    How to do it

Criteria
• What excellence looks like (annotated)
• Criteria in advance to help students to self-evaluate
Sample Assignments

Sample C (p. 8)

Purpose

• Skills practiced \}
• Knowledge gained \}

relevance to students
connection to LOs

Task: What to do; How to do it

Criteria

• What excellence looks like (annotated)
• Criteria in advance to help students to self-evaluate
Sample Assignments

Purpose

• Skills practiced } relevance to students
• Knowledge gained } connection to LOs

Task (problem-based, relevant)

• What to do; How to do it

Criteria

• What excellence looks like (annotated)
• Criteria in advance to help students to self-evaluate
Gather Feedback on Your Own Assignment

Why are we doing this now?

Purpose
– Knowledge: share feedback, insights
– Skills: apply transparency; engage community of practice

Task
– Four steps, 4 - 6 min each, in pairs / 3s

Criteria
– draft you can use in your course
– helpful insights from colleagues as novices
5 minute BREAK

• Sit next to a **disciplinary stranger** when you return
Choose an Assignment from Your Course

• from 1st half of the term
• after students are acquainted with basic tools and terminology the course uses
• when students are starting to apply those and try them out

Describe this assignment to a partner
(2 min each)
Feedback on Your Assignments, part 1 of 3

As a novice student, offer feedback on the **Purpose**
In pairs or 3s, discuss and define  (6 min total)

Five years after taking your course,
- What essential **knowledge** should students retain from doing this assignment?
- What **skills** should students be able to perform from doing this assignment?  *(p. 2 may help)*
- Why are these important to students?
Feedback on Your Assignments, part 2 of 3

handout page 6

As a novice student, offer feedback on the Task
In pairs or 3s, discuss and define  (6 min total)

As a novice, list the steps you’d take to do the assignment.
Feedback on Your Assignments, part 3 of 3

As a novice student, offer feedback on the Criteria
In pairs or 3s, discuss and define (6 min total)

As a novice:
- Are you confident you are doing the task effectively?
- Are you confident you are doing excellent work?
- Do you have annotated good examples?

To answer yes, what would you need?
Additional Research-based Strategies

*handout page 1*

Offer feedback in pairs, 3s (4 min total)

- Which additional research-based methods could be used?  *(chart, p. 1)*
How did we do in this peer activity?

Purpose
- Knowledge: share feedback, insights
- Skills: apply transparency; engage community of practice

Task
- Four steps, 4 - 6 min each, in pairs / 3s

Criteria
- draft you can use in your course
- helpful insights from colleagues as novices
- Strategies (chart, page 1)
Your in-class Activities (p. 9)

<table>
<thead>
<tr>
<th>1) years out</th>
<th>Knowledge &amp; Skills</th>
<th>Purpose</th>
<th>Task</th>
<th>Task Cues</th>
<th>Criteria</th>
<th>Stakes % high/low</th>
<th>Assessed by peer/teacher</th>
<th>6 Transparent Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Knowlege, disciplinary methods/tools content</td>
<td></td>
<td></td>
<td></td>
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</table>

[---You just did this part in pairs. -------------------------medium------------------------]

This is where an in-class activity can prepare students to excel on next assgt.

-----Are students now ready to excel on *this* graded assignment?-------

| 3) Evaluate | 4) Creative Contribution | | | | | | | |
|-------------|--------------------------|| | | | | | |
Your in-class Activities (p. 9)

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<th>Stakes %</th>
<th>Assessed by</th>
<th>6 Transparent Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge, disciplinary, methods/tools, content</td>
<td>In-class activity for practice before students do it for a grade (low stakes)</td>
<td>Take-home assignment</td>
<td>med/hi stakes</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Analysis / Application</td>
<td>In-class activity for practice before students do it for a grade (low stakes)</td>
<td>Take-home assignment</td>
<td>med/hi stakes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>In-class activity for practice before students do it for a grade (low stakes)</td>
<td>Take-home assignment</td>
<td>med/hi stakes</td>
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<tr>
<td>Creative Contribution</td>
<td>In-class activity for practice before students do it for a grade (low stakes)</td>
<td>Take-home assignment</td>
<td>med/hi stakes</td>
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How did we do?

PURPOSE:
– Consider and apply research on college students’ learning to the design of transparent course assignments / activities that offer equitable opportunities for all students to succeed

TASKS:
– Review research findings
– Apply to revising your assignments and activities

CRITERIA:
You’ll leave with
– Overview of research
– Strategies to revise your assignments and activities
– Draft ideas for an assignment, an activity

Long term: improved student confidence, skills, success
Strategies for Impact

• **Courses:** Intro (large, small), Gateway, High DWF, Majors/Pathways, Gen Ed

• **Networks:** Community Colleges, Research Intensive, Liberal Arts, Regional, Teaching/Learning Centers, STEM Ed Ctrs, Disciplinary Association conferences...
Please join us!
http://www.unlv.edu/provost/teachingandlearning

Transparent 2nd Tuesdays at 2:00 pm
https://zoom.us/s/337401450