

Putting It to Practice: Hands-On Learning Activities for Transforming Education

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Abstract

Using the learning object developed in a previous IJPE article (www.transformation-of-education.com) along with the activity design methodology, sample activities have been created for faculty and students to help with the processing of knowledge and internalizing of best practices associated with individual aspects in the Transformation of Education. The activities use cooperative learning to achieve shared understanding and meaningful closure within a single class period using best practices of Process Education. Two complete activities are presented: “Ownership: Taking Responsibility for Learning” and “Transparency: Sharing to Increase Learning.” Facilitation plans are offered for both, including answer keys.

Introduction

The Transformation of Education learning object (an interactive model available at www.transformation-of-education.com) brought to light the 14 aspects that are key to transformational change in education (see Figure 1). The learning object presents the characteristics, cultural pres-

ures, faculty behaviors, and student behaviors associated with each of the aspects. The aspects themselves each comprise a spectrum of behaviors, actions, and attitudes, from a traditional approach within culture and education (defined as RED by the authors), to a transformed approach, as informed by Process Education and constructivist approaches to culture and education (defined as GREEN

Figure 1 14 Aspects in the Transformation of Education along with their definitions

Challenge	<i>The degree to which increasing the level of difficulty is used in order to grow capacity for learning and performing</i>
Cognitive Complexity	<i>The degree to which training and doing is elevated to problem solving and research</i>
Control	<i>The locus of power/authority for the learning situation or experience</i>
Delivery	<i>The means by which information/knowledge is obtained by learners</i>
Design	<i>The purposeful arrangement of the instructional environment, materials, and experiences to support learning</i>
Efficacy	<i>The well-founded belief in one’s capacity to change and to make a difference</i>
Feedback	<i>Information about what was observed in a performance or work product</i>
Measurement	<i>The process of determining the level of quality of a performance or product</i>
Ownership	<i>The degree to which the learner accepts responsibility and accountability for achieving learning outcomes</i>
Relationship	<i>The degree of emotional investment an instructor or mentor has in his or her students or mentees</i>
Scope of Learning	<i>The contexts across which learning occurs and its application is demonstrated</i>
Self-Awareness	<i>The degree to which reflective and self-assessment practices are used by the individual to foster the growth of his or her learning skills across the cognitive, affective, and social domains</i>
Social Orientation	<i>The investment, interdependence, and responsibility for learning throughout a community</i>
Transparency	<i>The degree to which stakeholders can view individual, team, or collective performances</i>

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by the authors). While the ends of the spectrum are most easily recognizable, especially for the sake of demonstrative examples, such as are provided in the learning object, there is also a YELLOW phase for each aspect, where some degree of transformation has been accepted and put into practice. The goal of educational transformation is to move all educational participants increasingly towards GREEN, no matter where they begin on that spectrum. Previous work on the Transformation of Education provided *Faculty Guidebook* modules as references in order to help facilitate movement towards increasingly GREEN attitudes and practices, but questions still remained as to how the aspects worked together to facilitate change.

It was through the development of concept maps that the 14 aspects in the Transformation of Education were combined in a meaningful teaching/learning system, providing insight about the growth of a process educator from a traditional world of largely RED practices to a future world of largely GREEN practices (Beyerlein, Burke & Hintze, 2012). The concept maps explore teaching and learning progressing from a RED environment to a YELLOW environment finally to a GREEN environment. The final learning object included these concept maps as well as thematic “backpacks” which displayed the narrative description of key propositional units for each map. This object was found to be accessible in that our displays of a transformational learning environment could be understood by a traditional educator. Unfortunately, being able to access and understand a particular concept map does not automatically lead to an ability to perform in the environment described by that map.

Therefore, our goal with this current work was to create learning activities, focusing on individual aspects, that would improve the ability of learners to perform in transformed educational environments. We felt that any activity created should assist a learner in processing the knowledge about the aspect as well as ensuring that he or she gains an understanding of the behavioral changes associated with shifting practices from RED to GREEN in that aspect. In a learning situation transitioning from a RED to GREEN environment, both students and faculty are stakeholders (Nancarrow, 2007; Collins & Apple, 2007). For this reason, we targeted the activities at both pre-college-through-graduate-level students and novice-to-veteran faculty Process Education practitioners (Holmes & Findlen, 2007).

Activity Development

In creating the individual activities, the author team wanted to pilot a development process that could be replicated for each of the aspects, utilizing Process

Education practices for the activity development. The Activity Design Template (Hanson, 2007) was utilized as the basic design approach for each activity, and expanded as needed (Pacific Crest, 2009). This template assumes cooperative learning teams, the examination of problems, the inclusion of critical thinking questions, and skill exercises or additional challenges, some of which can be completed on an individual basis. To aid in the delivery of the activity, a facilitation plan including an answer key was also created for each activity using the Facilitation Plan Template (Minderhout, 2007). The activities were assessed at the Academy of Process Educators mid-year meeting utilizing the template for Assessing Learning Activities (Loertscher & Minderhout, 2007).

The author team selected two aspects from the Transformation of Education to pilot the design process: Ownership and Transparency. The *Ownership* aspect was chosen in order to showcase movement from RED to GREEN. In the traditional approach to learning, it tends to be assumed that learners are passive and attend learning situations where an instructor imparts knowledge to the learner. In this view, nearly all control over learning (what, when, how, and how well) is presumed to belong to the instructor; he or she **owns** the learning situation and takes responsibility for it. The activity *Ownership: Taking Responsibility for Learning* is designed to ensure that the person/team working through the activity understands what it means to “own your learning.” Gaining an understanding of what it means for the individual to own his or her *own* learning as well as how this ownership affects his or her future learning are key learning objectives. This activity enables the individual/team to create a thoughtful and useful definition of *ownership of learning* that takes into account both the benefits and costs of ownership of learning. Furthermore, it enables a learner to effectively discuss the context and dynamics of ownership of learning while at least theoretically accepting responsibility for his or her own learning (in the context of a given problem).

The aspect *Transparency* was chosen to clarify what it means to behave transparently in an educational setting. Transparency involves practices that are on a continuum between private (opaque) and public (transparent). Note that these practices are not dealing with the Family Educational Rights and Privacy Act (FERPA); they involve education situations where the instructor controls what is shared. If an educational situation is transparent, it increases the opportunity for four things: learning from others, teaching others, helping others, and being helped by others. Lack of transparency keeps learners’ struggles silent and invisible; it never becomes apparent that they are lost or need help. Lack of transparency also keeps

each student from potentially providing assistance to their peers, whether by helping with learning or in maintaining or boosting morale. And lack of transparency means that students can't use each other as models or exemplars. The activity *Transparency: Sharing to Increase Learning* is designed for the person/team completing the activity to analyze learning situations on a continuum of privacy ↔ transparency. The activity ensures that the person/team can identify all stakeholders of a learning performance, as well as non-transparent practices and the resulting impact they can have on stakeholders. Finally, the person/team can formulate an action plan for replacing non-transparent practices with transparent practices.

Future Work

While this paper shares an overview of the process of creating activities, and the concrete results for two aspects from the Transformation of Education, the authors plan to create activities exploring each of the aspects, using the same design process.

We believe that there are multiple uses for the finished activities,

- Serving as a springboard for the next generation of teaching/learning research
- Improving student outcomes in community-based student learning

References

- Beyerlein, S., Burke, K., & Hintze, D. (2012). Concept maps for linking aspects in the transformation of education, *International Journal of Process Education*, 4, 43-60.
- Collins, W. & Apple, D. (2007). Profile of a quality faculty member. In S. Beyerlein, C. Holmes, & D. Apple (Eds.), *Faculty guidebook*. Lisle, IL: Pacific Crest.
- Hanson, D. (2007). Designing process-oriented guided-inquiry activities. In S. Beyerlein, C. Holmes, & D. Apple (Eds.), *Faculty guidebook*. Lisle, IL: Pacific Crest.
- Hinze-Yates, D., Beyerlein, S., Apple, D., & Holmes, C. (2011). Transformation of education: 14 aspects, *International Journal of Process Education*, 3, 73-93.
- Holmes, C. & Findlen, R. (2007). Adult learning theories in process education. In S. Beyerlein, C. Holmes, & D. Apple (Eds.), *Faculty guidebook*. Lisle, IL: Pacific Crest.
- Loertscher, J. & Minderhout, V. (2007). Assessing learning activities. In S. Beyerlein, C. Holmes, & D. Apple (Eds.), *Faculty guidebook*. Lisle, IL: Pacific Crest.
- Minderhout, V. (2007). Creating a facilitation plan. In S. Beyerlein, C. Holmes, & D. Apple (Eds.), *Faculty guidebook*. Lisle, IL: Pacific Crest.
- Nancarrow, C. (2007). Profile of a quality learner. In S. Beyerlein, C. Holmes, & D. Apple (Eds.), *Faculty guidebook*. Lisle, IL: Pacific Crest.
- Pacific Crest (2009). *Activity design handbook*. Lisle, IL: Pacific Crest.

- Providing additional support to curricular materials such as *Foundations of Learning* or the *Student Success Institute Handbook*
- Helping to foster organizational change when used as part of both formal and informal faculty development events

The next steps for this research will include the prioritization of aspects to create the expanded set of the Transformation of Education activities, as well as the creation of an online site for housing the resource set of completed activities.

Appendix

Ownership: Taking Responsibility for Learning

- Activity Design Template
- Activity
- Facilitation Plan (Preparation, Record and Assess, Answer Key)

Transparency: Sharing for Increased Learning

- Activity Design Template
- Activity
- Facilitation Plan (Preparation, Record and Assess, Answer Key)

Activity Design Template: Ownership

(from *Faculty Guidebook 2.4.14 Designing Process-Oriented Guided-Inquiry Activities and Activity Design Handbook*)

Design Team	Steven Beyerlein, Kathleen Burke, Denna Hintze
Purpose	To sensitize the learner to the concept of ownership and responsibility for self, as relates to educational objectives, processes, and outcomes
Title	Ownership: Taking Responsibility for Learning
Type of Knowledge Item and Learning Models for Each	<p>Concept (Definition): Definition is formulated, applied, and revised</p> <p>Context (Skill Exercise/Case Study): Ownership, Responsibility, and Costs/Benefits are explored and applied in a problem-solving situation</p> <p>Way of Being (Ownership Table and Skill Exercises): Though not made explicit, a profile of a learner who owns his or her own learning (accepts responsibility for it) is created</p>
Why?	Answers what the student will learn and why it is relevant to the learner
Learning Objectives	<ol style="list-style-type: none"> 1. Define what it means to “own your learning” 2. Understand what it means for YOU to be the owner of your learning 3. Understand how owning your learning impacts your education now and in the future
Performance Criteria with Attributes	<p>Creation of a thoughtful and useful definition of ownership of learning that</p> <ul style="list-style-type: none"> • Addresses or takes into account both benefits and costs of ownership of learning • Enables a learner to effectively discuss the context and dynamics of ownership of learning • Enables a learner to at least theoretically accept responsibility for his/her own learning (in the context of a given problem)
Learning Skills	Identifying assumptions, Checking perceptions, Accepting ownership
Key Critical Thinking Questions and Sequencing	<ol style="list-style-type: none"> 1. How can you demonstrate ownership of your learning in this class? Give two examples that you could share in a group discussion. 2. How has your thinking or understanding about the concept of ownership changed as a result of your work on this activity? 3. Is there always a cost to ownership? Explain, giving examples as needed. 4. Is there always a benefit to ownership? Explain why or why not, giving examples as needed.
Information/ Resources Needed	Definition of “Ownership,” terms in Terminology section, access to Internet
Prior Knowledge Required	Previous learning experiences coupled with ability to conduct Internet searches as well as make validity judgements about what you find
Glossary	accountability, authority, responsibility, self-direction
Plan/Tasks	<p>Before class: Pre-reading (30 mins)</p> <p>IN class: Sharing about pre-activity reading and assignment. Fill in table, Answer CTQs (30 mins for both), discussion (as needed/desired)</p> <p>After class: Skill Exercise/Problem: 30 mins (out of class)</p>
Pre-Activity	Read Transformation of Education aspect on “Ownership,” find 2 articles about “Ownership,” drafting a definition of “Ownership,” and define the terms in Terminology.
Problems	Ownership Table, Skill Exercise scenario
Technology	Internet searches and research
Validation of Learning	Small group consensus resulting from answering Critical Thinking Questions and filling out the Ownership Table
Self-Assessment	Satisfaction with personal definition of learner ownership
Closure	Ownership certificate for future class or professional activity

Learning Skills



Identifying assumptions: examining preconceptions and/or biases

Checking perceptions: feeding back implied meaning

Accepting ownership: assuming responsibility for one's behavior

Why?



In the traditional approach to learning, we tend to assume that learners are passive and attend learning situations where teachers give them knowledge, much as one pours water into an empty glass. In this view, nearly all control over learning (what, when, how, and how well) is presumed to belong to the instructor or teacher: he or she **owns** the learning situation and takes responsibility for it. This view might make sense, if learners were mere robots who had no life outside of the classroom. But because they are human beings, their learning does not start or stop according to a course schedule, study periods, or whatever else they're doing. Learning happens all the time and stays with the learner, to some degree, after the class is over. Learners are not forbidden from thinking outside of class or seeking out information online. They are not empty glasses. The more they actively take responsibility for their learning by asking questions, looking for information, and trying, testing, and attempting solutions to problems, the greater their learning will be.

In an increasingly global world, employers look for workers who can do more than wait to be given instructions and then carry them out. Let's face it — that's exactly what robots and computers are for. Instead, employers need people who can take the initiative and solve problems, identifying where and how they can best achieve an intended effect. Employers want employees who can **own** the situations with which they are confronted and take responsibility for deciding and then doing what needs to be done.

This activity will give participants the opportunity to examine the concept of *ownership* in different contexts and then to explore, more deeply, what ownership of learning means, so that they understand how to begin taking the critical steps towards claiming and exercising ownership for their own learning.

Learning Objectives



1. Define what it means to “own your learning”
2. Understand what it means for you to be the owner of your learning
3. Understand how owning your learning impacts your education both now and in the future

Performance Criteria



Creation of a thoughtful and useful definition of *ownership of learning* that

- Addresses or takes into account both benefits and costs of ownership of learning
- Enables a learner to effectively discuss the context and dynamics of ownership of learning
- Enables a learner to at least theoretically accept responsibility for his/her own learning (in the context of a given problem)

Resources



Internet: <http://www.transformation-of-education.com/>

Plan



1. Before class, read about “Ownership” in the Transformation of Education (available at: <http://www.transformation-of-education.com/>).
2. Before class, find two articles online that are focused on “Ownership.” Come up with a definition and an example that demonstrates that definition.
3. Define each of the terms in Terminology.
4. Complete the Group Discussion portion of this activity, working together in your learning groups. If you are using formal team roles, include, at a minimum, Captain, Recorder, and Spokesperson.
 - a) Using the definition you brought with you as a result of your work on the pre-activity, create a definition of *ownership* for the group.
 - b) Use the Black Eyed Peas song “Own It” to process your definition.
5. Still working in groups, solve the Problem (complete the table) and answer the Critical Thinking Questions.
6. Complete the Skill Exercises after class, submitting your responses as directed by your instructor.

Terminology



Provide a short definition for each of the following terms:

accountability _____

authority _____

responsibility _____

self-direction _____

Group Discussion



1. Group definition of *ownership*:

2. The Black-Eyed Peas song, “Own It” contains the following lines:

All my dreamers, all my believers, tomorrow leaders
If you been dreaming for all your life
This is your chance Everybody is a star
It don't matter who you are, no
Keep on reaching for your dreams 'Cause it ain't crazy as it seems
We are calling all the dreamers
We are calling the believers Looking for the big achievers
Keep on reaching for your dreams
Hey, say I wanna own it, wanna, wanna own it

Consider your group definition. How does it apply within the context of the song? Does the song cause you to reconsider your definition? Why? How?

3. Update your group definition of *ownership*, if necessary:

Problems Fill in the following table.

	A car	Your cat/dog/pet goldfish	Your learning and education
Who owns it?			
How did its ownership start?			
How can its ownership change?			
Who gets the benefit from owning it?			
Who bears the cost of its ownership?			
Benefits of ownership (give 2).			
Costs of ownership (give 3).			
How can you be a better owner?			

Critical Thinking Questions



1. How can you demonstrate ownership of your learning in this class? Give two examples that you could share in a group discussion.
2. How has your thinking or understanding about the concept of ownership changed as a result of your work on this activity?
3. Is there always a cost to ownership? Explain your answer, giving examples as needed.
4. Is there always a benefit to ownership? Explain why or why not, giving examples as needed.

(Use this part of the plan to help you prepare to facilitate the activity)

1. Outcomes

(List outcomes and underlying learning skills and describe anticipated evidence that each has occurred.)

- *Learning groups have completed the Table of Ownership (Problem). This gives them the opportunity to identify assumptions and check perceptions among group members with respect to what ownership of learning means.*
- *Learning groups have answered the Critical Thinking Questions. This also gives them the opportunity to work cooperatively in identifying assumptions and applying knowledge in new contexts.*
- *Individual learners complete the Skill Exercises, identifying the locus of responsibility for learning (or not) as lying with the individual. This gives them the opportunity to consider the implications of accepting responsibility for learning, at least theoretically.*
- *Completion of a Certificate of Ownership for the current course. This is where the learner formally accepts ownership of his or her learning in this course, at least theoretically (within the context of this learning activity). Instructors can elect to make this Certificate and process as formal as they like.*

2. Activity Type *Guided Discovery*

3. Roles

If formal team roles are used, these should include, at a minimum, Captain, Recorder, and Spokesperson.

4. Preparation Assessment Plan

time allotted

Through a brief discussion, verify that students have completed Steps 1, 2, and 3 of the Plan and have their definitions of ownership with them. Asking where various students found information online about ownership could be an interesting way to start the discussion.

5. Activity Set-up Plan

time allotted

Briefly review the remainder of the activity Plan, outlining that students will work in their groups through the remainder of the class or activity period.

They will hold a brief group discussion (no more than 5 minutes) and put together a group definition of ownership. They will use that definition to complete the Group Discussion portion of the activity (10 minutes).

They will then, as a group, complete the Table of Ownership and answer the Critical Thinking Questions (devote as much time to this as you wish, but no less than 20 minutes).

Be sure to leave at least 10 minutes to collect and review their work (addressing any questions that were especially troubling, or interesting insights anyone had that may be informative to other learners) and introduce the Skill Exercises, which should be completed outside of class. If, for some reason, you elect to have students complete this portion of the activity during class, they need to work individually and no less than 30 minutes should be allotted to this work.

6. Group Work

time allotted 30 min or more

Identify issues that may affect performance; link them to learning skills, and describe your anticipated response.

	Cognitive	Social	Affective
Situation	<i>focus is on ownership in a solely monetary or tangible sense</i>	<i>one person dominating discussions</i>	<i>defensiveness, especially with respect to students who are very “type A” and feel they already own their learning</i>
Skill	<i>transferring knowledge</i>	<i>assisting others</i>	<i>acknowledging others</i>
Intervention	<i>Suggest that in addition to just thinking in terms of “cost/benefits” that they consider that another way to see it might be “rights/responsibilities”</i>	<i>Suggest that the dominant person act as an “interviewer” and help gather individual responses that can then be used as the basis for a team response.</i>	<i>Attempt to engage these students in a bit of discussion about stakeholders in others’ learning and in what instances they benefit from others’ ownership.</i>

7. Closure

time allotted 10 min

Group Recorders or Spokespersons should hand in group work (Group Discussion responses, Table of Ownership, and Critical Thinking Questions).

If there is time, consider asking group Reflectors (or Captains) to share their group’s response to Critical Thinking Question 1: “How can you demonstrate ownership of your learning in this class? Give two examples that you could share in a group discussion.” Alternatively, instructors can inquire about any issues (questions or insight) that arose during their group work.

Remind students to complete the Skill Exercises outside of class and be sure to let them know how you plan to collect their work (to have them submit it online, in a dropbox, during the next class, etc.).

(Use this part of the plan to record and assess the activity and facilitation experience.)

8. Pre-Assessment and Activity Set-Up Notes

time spent

9. Group Work Notes

time spent

Situation	
Skill	
Intervention	
Result	

Situation	
Skill	
Intervention	
Result	

Situation	
Skill	
Intervention	
Result	

10. Closure Notes

time spent

11. Reconciliation

What evidence demonstrates that outcomes were met? Use data from group work to document.

12. SII of Class Period

1. Group definition of *ownership*:

Student answers will vary, but will most likely be at a transactional or economic level, for tangible objects.

2. The Black-Eyed Peas song, “Own It” contains the following lines...

Consider your group definition. How does it apply within the context of the song? Does the song cause you to reconsider your definition? Why? How?

Answers will vary but should cause students to move from a transactional or literal model of ownership to appreciating ownership as having multiple meanings or more complex implications. We have the phrase “own up” as in to take responsibility. This is essentially the direction the lyrics steer them towards.

3. Update your group definition of *ownership*, if necessary:

Student answers will vary but will most likely redefine ownership much more broadly than previously.

Problems

Fill in the following table.

Responses will vary. The point of this problem is for learners to move, consistently and repeatedly, from a literal and probably economic or transactional model of ownership to one that is far more complex and personally meaningful.

Instructors should feel free to steer learners away from a purely monetary perspective, if that is predominantly what is seen and heard while groups work to solve this problem.

Feel free to ask questions that provoke thought and discussion such as, “Are all costs purely financial? What about time as a cost? Or instances where someone sacrifices something like time with family or friends in order to complete a degree? Are those also costs?”

Sample student responses are offered in the table that follows.

	A car	Your cat/dog/pet goldfish	Your learning and education
Who owns it?	<i>me/my parents/the bank</i>	<i>me/my family</i>	<i>me</i>
How did its ownership start?	<i>get keys (me) or sign a loan agreement (the bank) or have a verbal agreement (my parents)</i>	<i>pick it up, buy it, find it, adopt it</i>	<i>at birth (informal education) or by getting on the bus for kindergarten, by law, children have to go to school, even if it is home schooling</i>
How can its ownership change?	<i>transfer of title (sell it), break agreement</i>	<i>good will (feed the dog and you own it), it runs away, you sell it or give it away</i>	<i>it can't, though others will have a vested interest in it</i>
Who gets the benefit from owning it?	<i>you and those you transport, your parents don't have to drive you so they benefit, and the bank makes money on the car (interest on the loan)</i>	<i>the cat, dog, or pet itself, me through the joy of owning it (also they say that pets lower blood pressure)</i>	<i>me, anyone who I help or give benefit to, as a result of what I've learned and know (employers, peers, patients, etc.)</i>
Who bears the cost of its ownership?	<i>me, or the bank, or my parents (the cost of the car, its maintenance, and insurance)</i>	<i>the person who takes care of it and pays for food and the vet (or toys, grooming, etc.)</i>	<i>me (in what I pay and what I give up, like free time), my parents and financial aid</i>
Benefits of ownership (give 2)	<i>you get to use it you can lend or share it</i>	<i>companionship stimulation</i>	<i>able to use and apply it in a career or daily life be respected</i>
Costs of ownership (give 3)	<i>repairing it maintaining or insuring it parking (permits, costs, fines)</i>	<i>walking or exercising it veterinarian costs feeding or washing it</i>	<i>higher education cost time costs delayed gratification (I could be working now, even if it were a lower-paying job)</i>
How can you be a better owner?	<i>keeping up with maintenance (prevent problems)</i>	<i>taking better care of my pet, cleaning up after it more attentively, learning more about how to be a better pet owner (re-search)</i>	<i>not blaming others for my choices being more responsible (studying more and harder) being a better student not stopping learning, even when school is "finished" sharing my learning with others (volunteering, for example)</i>

Critical Thinking Questions

1. How can you demonstrate ownership of your learning in this class? Give two examples that you could share in a group discussion.

Responses will vary but would optimally make specific reference to course requirements or objectives or to best practices for learning or studying.

2. How has your thinking or understanding about the concept of ownership changed as a result of your work on this activity?

Responses will vary, but should optimally demonstrate awareness of an expanded definition or appreciation for a definition that is more meaningful as a result of the time spent on the activity.

3. Is there always a cost to ownership? Explain your answer, giving examples as needed.

Responses will vary but should be thoughtful, exploring if there aren't cases where one can actually own something without that ownership having any effect at all (i.e., owning it is the same as not owning it, insofar as costs go). Possible contexts for this might include something you were given that required no action on anyone's part (like a pet rock). We have a strong cultural notion that "There's no such thing as a free lunch"; this question gives students the opportunity to confront that assumption.

4. Is there always a benefit to ownership? Explain why or why not, giving examples as needed.

Responses will vary, but similar to Question 3, students should attempt to find the exception — the ownership that brings no benefit whatsoever. The important aspect of both these questions are that students are demonstrating critical thinking and making a case with examples (demonstrating).

Skill Exercises

1. You're taking a class and one learning goal is for all students to learn to calculate both simple and compound interest on loans. This is critical knowledge for the course — you can't pass the final unless you know how to do this. You must pass the final to pass the course. And you must pass the course to graduate. (This is also knowledge you're likely to need later in life.) Your instructor is great but seems to think that you can learn what you need from your course text. Unfortunately, those pages are missing from the course text you purchased. The final is in 2 weeks.

- a) Who is responsible for whether or not you pass the class? Why?

Responses will vary but the goal of this exercise is for students to confront, in a concrete fashion, with examples and justification, the locus of responsibility and potential costs/benefits of ownership.

- b) Who is most likely to suffer negative consequences of you failing the final?

In the scenario as presented, the only negative consequences would be to the student.

- c) What does question b) above have to do with anything? Why does it matter?

The question makes clear that it is absolutely critical for the student to pass the course (a much-needed benefit); that should translate to acceptance of responsibility, even when circumstances and contexts don't seem "fair" (it was not fair or in the student's control that the book was missing pages).

This matters because as much as we like for things to be “fair” and “just,” accepting responsibility potentially includes when things are fair and when they are not. Examples of this might include parenting (where the parent sometimes isn’t treated fairly or gets short shrift but must still act in a responsible way) or pet ownership (an owner is responsible for what his or her pet does, regardless of circumstances).

- d) List as many potential solutions as you can think of for getting from where you are now, in the imaginary class, to passing the final.

Responses will vary but possible solutions include buying a new book, borrowing a book from a friend, seeing the information online, seeking out additional help during office hours, arranging for tutoring, putting together a study group, etc.

- e) Next to each solution in d), determine who is responsible for implementing that solution (making it happen).

It will always be the student. The problem scenario stated that the professor “seems to think that you can learn what you need from your course text.” Thus, any solution, even letting the professor know that the course text was damaged (in hopes that he or she might provide a new copy or the missing pages) necessarily begins with the student.

2. Create a certificate of ownership for this (or another) class. Be sure to include what that ownership means, what exactly is being owned (the learning outcomes or goals and how they are to be met), and the rights and responsibilities of ownership.

Student responses will vary (some students may create very elaborate certificates; there are many templates that can be found online). Instructors may elect to make these part of a learning journal or course learning contract.

Activity Design Template: Transparency

(from *Faculty Guidebook 2.4.14 Designing Process-Oriented Guided-Inquiry Activities and Activity Design Handbook*)

Design Team	Steven Beyerlein, Kathleen Burke, Denna Hintze
Purpose	To sensitize the learner to the concept of transparency in performances as relates to educational objectives, processes, and outcomes
Title	Transparency: Sharing for Increased Learning
Type of Knowledge Item and Learning Models for Each	Concept (Definition): Definition is formulated, applied, and revised Context (Skill Exercise/Case Study): Transparency, Performance, and Stakeholders are explored and applied in a problem-solving situation Way of Being (Transparency Table and Skill Exercises): Though not made explicit, a profile of a learner who appreciates and uses transparent learning practices is created
Why?	Answers what the student will learn and why it is relevant to the learner
Learning Objectives	<ol style="list-style-type: none"> 1. Define transparent practices in the context of learning situations 2. Understand that stakeholders are affected by the degree of transparency/privacy a learner practices 3. Appreciate that increased transparency can yield benefits to both learners & stakeholders
Performance Criteria with Attributes	<p>Analysis of practices on a continuum of privacy ↔ transparency in a learning situation</p> <ul style="list-style-type: none"> • Identifies all stakeholders to a learning performance • Identifies non-transparent practices and the resulting impact they can have on stakeholders • Formulates an action plan for replacing non-transparent practices with transparent practices • Determines the resulting impact transparent practices can have on the same stakeholders
Learning Skills	Envisioning, Collaborating, Being open
Key Critical Thinking Questions and Sequencing	<ol style="list-style-type: none"> 1. Looking at your table, what three individuals/groups benefitted the most from privacy and what do they have in common? 2. Looking at your table, what three individuals/groups benefitted the most from transparency and what do they have in common? 3. In general, why is transparency valuable in an educational context? 4. If transparency is something that an individual must choose (i.e., no one will force someone to share the work they do or how they do it), why would individuals refuse to work with transparency? 5. What are some of the reasons students are uncomfortable sharing in class (using transparent practices)? Give at least three. 6. For each of the reasons given in Question 7, draft a short action plan (1 or 2 sentences) for overcoming that barrier to sharing.
Information/ Resources Needed	Definition of terms in Terminology section, access to Internet
Prior Knowledge Required	Previous learning experiences
Glossary	performance, privacy, stakeholder, transparency
Plan/Tasks	<p>Before class: Pre-reading (30 mins)</p> <p>IN class: Sharing about pre-activity reading and terms. Fill in table, Answer CTQs (30 mins for both), discussion (as needed/desired)</p> <p>After class: Skill Exercise/Problem: 30 mins (out of class)</p>
Pre-Activity	Read Transformation of Education aspect on “Transparency,” and define the terms in Terminology.
Problems	Transparency Table, Skill Exercise scenario
Technology	Internet searches and research
Validation of Learning	Small group consensus resulting from answering Critical Thinking Questions and filling out the Transparency Table
Self-Assessment	Satisfaction with analyses of learning performances and transparency
Closure	Completion of Skill Exercises (analysis of scenario)

Learning Skills



Envisioning: imagining desired conditions

Collaborating: working together for mutual benefit

Being open: welcoming and expecting to find novelty

Why?



Most of us live in a predominant culture that tends to value a high degree of individual privacy. So much so, in fact, that when more open practices, such as collaborating and sharing are more useful, we still tend to avoid them. Part of the reason for this is because we tend to delineate our public and private lives very clearly, so that we shift from our public self who shares and performs for grades or paychecks to our private self who shares only selectively. (We can see this tension between public and private at play in the way we deal with and talk about celebrities — we tend to see them as public figures, who are thus always performing in one way or another, and we are surprised, put off, or amused when they behave as if they have a private life that isn't open to the camera or gossip column.) Ultimately too, it is the public or shared performance that is valued by the public or group; what the individual does on his or her own is largely invisible and thus tends to be considered unimportant.

Beyond this, we also live in a culture where competency is valued: the better the performance, the more it is valued. This is why the best performance at the Olympics is awarded the most valuable metal: gold. So with a premium on high-quality (i.e., no mistakes!) public or shared performances, it's no wonder we tend to hold our cards close and hedge our bets, shying from performing publicly, until we know we're going to be awarded the gold, get the perfect 10, and be carried off the field by adoring fans. While that isn't very realistic, between shyness, fears of being judged or thought of badly, and these cultural pressures, we have a strong tendency to not want to share anything less than perfection or our very best effort.

But what about in an educational setting? From which scenario do you learn more: 1) watching a video of a man flawlessly juggling seven flaming bowling pins or 2) watching a how-to video that shows you the basics of juggling, starting hand position, common basic mistakes, and the essential physical moves involved in juggling three easy-to-catch beanbags? While the first scenario is certainly entertaining and shows an amazing and high-quality performance, if your objective is to **learn** how to juggle, the transparency of the second performance makes it much more valuable.

In a similar vein, if we can overcome our fears and cultural tendencies to be willing to be more transparent by doing things such as sharing our rough drafts, giving honest feedback to each other, asking questions when we're not understanding something in class, sharing our insights and "A-HA!" moments with others, or collaborating on a group project, we not only put ourselves in a position to potentially teach others, we are also open to learning from them, giving and receiving the kind of input and feedback that can help each of us learn more effectively.

Learning Objectives



1. Define *transparent practices* in the context of learning situations
2. Understand that stakeholders are affected by the degree of transparency/privacy practiced by a learner
3. Appreciate that increased transparency can yield benefits to both learners and stakeholders

Performance Criteria



Analysis of practices on a continuum of privacy ↔ transparency in a learning situation

- Identifies all stakeholders to a learning performance
- Identifies non-transparent practices and the resulting impact they can have on stakeholders
- Formulates an action plan for replacing non-transparent practices with transparent practices
- Determines the resulting impact transparent practices can have on the same stakeholders

Plan



1. Before class, read about “Transparency” in the Transformation of Education (available at: <http://www.transformation-of-education.com/>).
2. Before class, define each of the terms in Terminology. Be ready to review your definitions in a short class discussion.
3. Working in groups during class, solve the Problem (complete the table) and answer the Critical Thinking Questions.
4. Complete the Skill Exercises after class, submitting your responses as directed by your instructor.

Terminology



Provide a short definition for each of the following terms:

performance _____

privacy _____

stakeholder _____

transparency _____

Resources



Internet: <http://www.transformation-of-education.com/>

Problems Fill in the following table.

	What is a typical performance for the individual or team?	Who are the Stakeholders for the performance?	Who benefits from PRIVACY?	Who benefits from TRANSPARENCY?
Magician				
Research Scientist				
Doctor				
Teacher				
Football Team				
Cooperative Learning Team (in a classroom setting)				
You, in THIS class, working on this activity				

Critical Thinking Questions



1. Looking at your table, what three individuals/groups benefitted the most from privacy and what do they have in common?
2. Looking at your table, what three individuals/groups benefitted the most from transparency and what do they have in common?
3. In general, why is transparency valuable in an educational context?
4. If transparency is something that an individual must choose (i.e., no one will force someone to share the work they do or how they do it), why would individuals refuse to work with transparency?
5. What are some of the reasons students are uncomfortable sharing in class (using transparent practices)? Give at least three.
6. For each of the reasons given in Question 7, draft a short action plan (1 or 2 sentences) for overcoming that barrier to sharing.



Read the following scenarios. Select one of them upon which to focus for completing the prompts that follow the scenarios.

Scenario 1

Marcus was pretty quiet, but was a good person to have on your team. He was thoughtful and took great notes when he was team recorder/note-taker. He wasn't really close to anyone in class, but was friendly enough. Then he started missing classes about 4 weeks into the semester. His learning team made do without him and while he was missed a bit at first, others learned to take better notes and it actually became a little awkward when he did show up. He said something about working at a new job, but no one seemed to know more than that. He didn't show up for the midterm and soon thereafter dropped the class. He did show up, one final time, and apologized to his team: "I'm really sorry, you guys. I had so much trouble with the first paper and just couldn't seem to catch back up. I had hoped that I'd be able to take the midterm and at least pass the class, but I just struggled too much. You guys were great and thanks for not getting on my case about me not showing up. And I'm sorry if I made it harder on you and the team by giving up." After Marcus left, two members of his group were overheard, "I didn't have any idea. Did you?" "No. Not a clue."

Scenario 2

Rachel is very proud of her 4.0 grade average and being on the Dean's List for the third consecutive semester. She is driven and plans to graduate a semester early, with full honors. She despises group work, and feels very strongly that others use collaboration as an excuse to ride her coattails and essentially let her do all the work. She's not willing to risk her grade by letting someone else be responsible for work that is part of her grade, so she insists on working alone, rather than in a group, when it comes to activities and projects. Moreover, she has complained to her professor that she is just not comfortable with group discussion and assessment of their term papers. "I don't understand why the research and work I do should be shared with anyone else. It's MY work and should only be graded by a professor. Why should it matter what students think about my paper? I don't want them reading my work."

Central actor/character	
All stakeholders (be sure to include the central actor!)	
Degree of transparency used by actor	
Result of that transparency (for all stakeholders)	

What are three things the central character could have done to be more transparent?
How might this transparency affect the actions of the other stakeholders in the scenario?
Re-draft the scenario, assuming a much higher degree of transparency on the part of the central actor than in the original scenario.
How did things change?
What was the benefit to each stakeholder from the change?

(Use this part of the plan to help you prepare to facilitate the activity)

1. Outcomes

(List outcomes and underlying learning skills and describe anticipated evidence that each has occurred.)

- *Learning groups have completed the Table of Transparency (Problem). This gives them the opportunity to identify assumptions and check perceptions among group members with respect to transparency, privacy, performance, and stakeholders in a performance..*
- *Learning groups have answered the Critical Thinking Questions. This also gives them the opportunity to work cooperatively in identifying assumptions and applying knowledge in new contexts.*
- *Individual learners complete the Skill Exercises, identifying the impact of increased and decreased transparency in performance on all stakeholders in a performance. This should give learners the opportunity to reflect on a familiar situation and consider the positive implications for learning when practices are more transparent.*

2. Activity Type Guided Discovery

3. Roles

If using formal team roles, these should include, at a minimum, Captain, Recorder, and Spokesperson.

4. Preparation Assessment Plan

time allotted

Through a brief discussion, verify that students have completed Steps 1 and 2 of the Plan and have their definitions of performance, privacy, stakeholder, and transparency with them. Asking students their thoughts about the information on transparency available in the Transformation of Education site could be an effective way to start the discussion.

5. Activity Set-Up Plan

time allotted

Briefly review the remainder of the activity Plan, outlining that students will work in their groups through the remainder of the class or activity period.

Students will, in their groups, complete the Table of Transparency and answer the Critical Thinking Questions (devote as much time to this as you wish, but no less than 20 minutes).

Be sure to leave at least 10 minutes to collect and review their work (addressing any questions that were especially troubling and taking note of interesting insights that arose that may be informative to other learners) and introduce the Skill Exercises, which should be completed outside of class. If, for some reason, you elect to have students complete this portion of the activity during class, they need to work individually and no less than 30 minutes should be allotted to this work.

6. Group Work

time allotted

Identify issues that may affect performance, link them to learning skills, and describe your anticipated response.

	Cognitive	Social	Affective
Situation	<i>focus is on transparency in a solely political or personal way (national or individual)</i>	<i>one person dominating discussions</i>	<i>defensiveness, especially with respect to students who feel that transparency means they are at risk of being judged</i>
Skill	<i>transferring knowledge</i>	<i>assisting others</i>	<i>recognizing emotional contexts</i>
Intervention	<i>Suggest that while these are interesting contexts, the same principles of transparency and privacy are at work in learning situations and in the classroom. Challenge them to determine the critical differences between nation or individual and class.</i>	<i>Suggest that the dominant person act as an “interviewer” to help gather individual responses that can then be used as the basis for a team response.</i>	<i>Remind these students that even failure is productive if we learn from it and that the only real failure is to refuse to take the risks required for learning and growth. Giving these students the responsibility of helping others can also be useful, as they will learn that transparent practices offer the greatest help to others.</i>

7. Closure

time allotted 10 min

Group Recorders or Spokespersons should hand in group work (Table of Transparency, and responses to the Critical Thinking Questions).

If there is time, consider asking group Reflectors (or Captains) to share their group’s response to Critical Thinking Questions 7 and 8: “What are some of the reasons students are uncomfortable sharing in class (using transparent practices)? Give at least three;” and “For each of the reasons given in Question 7, draft a short action plan (1 or 2 sentences) for overcoming that barrier to sharing.”

Remind students to complete the Skill Exercises outside of class and be sure to let them know how you plan to collect their work (to have them submit it online, in a dropbox, during the next class, etc.).

(Use this part of the plan to record and assess the activity and facilitation experience.)

8. Pre-Assessment and Activity Set-Up Notes

time spent

9. Group Work Notes

time spent

Situation	
Skill	
Intervention	
Result	

Situation	
Skill	
Intervention	
Result	

Situation	
Skill	
Intervention	
Result	

10. Closure Notes

time spent

11. Reconciliation

What evidence demonstrates that outcomes were met? Use data from group work to document.

12. SII of Class Period

Problems Fill in the following table:

Responses will vary. The point of this problem is for learners to become increasingly adept at quickly analyzing a performance for stakeholders and then thinking through how degrees of transparency affect each of them.

Instructors should feel free to steer learners away from highly imaginative “What If” scenarios where ANY answer could be given. Remind students to think of typical and general instances and examples.

If students seem to be working through the table without trouble, feel free to ask thought- and discussion-provoking questions such as, “Is it possible for the same stakeholder to benefit from both privacy and transparency in the same performance?”

Sample student responses are offered in the table that follows.

	Who benefits from TRANSPARENCY?	Who benefits from PRIVACY?	Who are the Stakeholders for the performance?	What is a typical performance for the individual or team?
Magician	<i>people who like to know how the trick was done, though they can either know the truth or be entertained</i>	<i>the magician</i>	<i>the magician, any assistant, the audience</i>	<i>performing on stage, in a magical act, in front of an audience</i>
Research Scientist	<i>anyone who potentially benefits from discoveries or the science itself, other scientists who are working on similar ideas, OUR scientist, if he needs the input of others</i>	<i>the company where he/she works (it can give them a competitive advantage in the marketplace)</i>	<i>the scientists, any assistants (lab techs), anyone who benefits from the research, the company or school that pays the scientist</i>	<i>working in a lab or in the world, gathering information, testing ideas</i>
Doctor	<i>patients, especially in cases of malpractice; knowing there is a problem enables one to address it</i>	<i>the patient (to feel comfortable in sharing intimate information), the hospital or insurance companies can enjoy a competitive advantage through some degree of privacy</i>	<i>the doctor, the hospital or clinic, the patient, insurance companies</i>	<i>treating patients</i>
Teacher	<i>anyone trying to learn or benefit from learning</i>	<i>no one I can think of</i>	<i>teacher, students, school (parents, if students are children)</i>	<i>educating students</i>
Football Team	<i>fans or audience who like to understand strategy and stats; if a team knows the other team's strategy, they have an advantage</i>	<i>the team with private strategy and plays (not shared with the other team)</i>	<i>the team, the opposing team, coaches, investors, audience and fans</i>	<i>a football game</i>
Cooperative Learning Team (in a classroom setting)	<i>everyone who is trying to learn; the more people participating in a learning activity, the more ideas and input you have</i>	<i>if teams work independently of each other, they can compete in some ways. This limited kind of privacy allows for competition</i>	<i>all team members, the teacher, the school</i>	<i>a learning activity</i>
You, in THIS class, working on this activity	<i>all of us</i>	<i>no one I can think of, though I might FEEL better about it being more private</i>	<i>me, my group, my professor, the school, and to some degree, anyone who benefits from what I learn and do here</i>	<i>filling out this table and working with my group to answer the Critical Thinking Questions (and me, later, doing the Skill Exercises)</i>

Critical Thinking Questions

1. Looking at your table, what three individuals/groups benefitted the most from privacy and what do they have in common?

Responses will vary but should, at least include the magician and football team. Students will differ on the degree to which the research scientist and doctor benefit from privacy (a potential discussion point).

Each of the individuals or groups who benefit from privacy need secrecy, either for their performance to work (the magician) or for a competitive advantage (the scientist and football team). Students may also leap to the notion of 'disclosing information' (secrets) and thus equate the magician, scientist, and doctor. The point is that students are grappling with reasons for wanting privacy in professional performances.

2. Looking at your table, what three individuals/groups benefitted the most from transparency and what do they have in common?

Teacher and both groups of learners. A case can be made for the scientist and doctor, if students focus on collaboration and sharing of information (also educational situations/contexts).

Each of the individuals or groups who benefit from transparency are working to learn or teach others. The point is that students are grappling with benefits to transparency in select performances.

3. In general, why is transparency valuable in an educational context?

Responses will vary but students should, at this point, be focusing on sharing information: teaching, and learning.

4. If transparency is something that an individual must choose (i.e., no one will force someone to share the work they do or how they do it), why would individuals refuse to work with transparency?

Responses will vary but if an individual is not forced to share, the only other limits to sharing will be cultural, personal, or practical. This is a kind of Rorschach question; students will tend to give scenarios or reasons that are very familiar to them, if not their own.

5. What are some of the reasons students are uncomfortable sharing in class (using transparent practices)? Give at least three.

Responses will vary but common answers include fear of judgment (personal or focused on what is shared), having one's work appropriated or claimed by others, being unready (wanting to be more prepared), and actually not having anything to share.

6. For each of the reasons given in Question 5, draft a short action plan (1 or 2 sentences) for overcoming that barrier to sharing.

Responses will vary. Finding a way to share the responses to this question, along with the one preceding it, will be very helpful to many learners. If there isn't time for an in-class discussion of different barriers and action plans, consider finding another way to share those responses with the class in general.

Skill Exercises

Read the following scenarios. Select one of them upon which to focus for completing the prompts that follow the scenarios.

Scenario 1

Marcus was pretty quiet, but was a good person to have on your team. He was thoughtful and took great notes when he was team recorder/note-taker. He wasn't really close to anyone in class, but was friendly enough. Then he started missing classes about 4 weeks into the semester. His learning team made do without him and while he was missed a bit at first, others learned to take better notes and it actually became a little awkward when he did show up. He said something about working at a new job, but no one seemed to know more than that. He didn't show up for the midterm and soon thereafter dropped the class. He did show up, one final time, and apologized to his team: "I'm really sorry, you guys. I had so much trouble with the first paper and just couldn't seem to catch back up. I had hoped that I'd be able to take the midterm and at least pass the class, but I just struggled too much. You guys were great and thanks for not getting on my case about me not showing up. And I'm sorry if I made it harder on you and the team by giving up." After Marcus left, two members of his group were overheard, "I didn't have any idea. Did you?" "No. Not a clue."

Central actor/character	<i>Marcus</i>
All stakeholders (be sure to include the central actor!)	
<i>Marcus, his learning team, the rest of the class, the teacher, maybe his family too</i>	
Degree of transparency used by actor	<i>very little; almost none until the end</i>
Result of that transparency (for all stakeholders)	
<p><i>Answers will vary but could include:</i></p> <p><i>Marcus didn't get the help he could have used because no one on his team had a clue that he needed it and he had to drop the class, potentially losing money too. The team lost out on his participation. The rest of the class missed any contributions Marcus would have made and also missed any opportunities to help him. The teacher missed an opportunity to help a student in need and potentially educate one as well. Depending on what happens next, having to drop the class could be a disaster for Marcus (if he was on financial aid, etc). That could impact his family as well.</i></p>	
What are three things the central character could have done to be more transparent?	
<p><i>Answers will vary but actions include:</i></p> <p><i>He could have told his team he was struggling</i></p> <p><i>He could have asked his professor for help</i></p> <p><i>He could have kept coming to class</i></p>	

How might this transparency affect the actions of the other stakeholders in the scenario?

Answers will vary but if he had asked for help or been transparent in his need, he could have received the help he needed and thus might not have had to drop, the team would have kept his input, the class could have benefitted, and so on.

Re-draft the scenario, assuming a much higher degree of transparency on the part of the central actor than in the original scenario.

Answers will vary. Students will use this as an opportunity to grow their skills in envisioning.

How did things change?

Answers will vary. Students will use this as an opportunity to grow their skills in envisioning.

What was the benefit to each stakeholder from the change?

Answers will vary. Students will use this as an opportunity to grow their skills in envisioning.

Scenario 2

Rachel is very proud of her 4.0 grade average and being on the Dean's List for the third consecutive semester. She is driven and plans to graduate a semester early, with full honors. She despises group work, and feels very strongly that others use collaboration as an excuse to ride her coattails and essentially let her do all the work. She's not willing to risk her grade by letting someone else be responsible for work that is part of her grade, so she insists on working alone, rather than in a group, when it comes to activities and projects. Moreover, she has complained to her professor that she is just not comfortable with group discussion and assessment of their term papers. "I don't understand why the research and work I do should be shared with anyone else. It's MY work and should only be graded by a professor. Why should it matter what students think about my paper? I don't want them reading my work."

Central actor/character	Rachel
All stakeholders (be sure to include the central actor!)	
<i>Rachel, group (class or team), professor</i>	
Degree of transparency used by actor	none, unless she is forced
Result of that transparency (for all stakeholders)	
<i>Responses will vary but her refusal to share keeps her from teaching others (if her work is so strong, it would make an excellent model for other students to try and emulate). She loses the opportunity to learn from them or receive their help (she doesn't want their assessments of her work). Her professor ends up having to work with her one-on-one (which is inefficient) rather than as part of a learning group.</i>	
What are three things the central character could have done to be more transparent?	
<i>Responses will vary but could include things such as, She could have participated in a learning group She could have been willing to try collaborating on a project or activity. She could have embraced and appreciated group assessment of her term paper</i>	
How might this transparency affect the actions of the other stakeholders in the scenario?	
<i>Responses will vary but had she been willing to work more transparently, not only could she have benefitted from the input of others (learning how to work collaboratively as well), but she also might have shared with and helped others.</i>	

Re-draft the scenario, assuming a much higher degree of transparency on the part of the central actor than in the original scenario.

Answers will vary. Students will use this as an opportunity to grow their skills in envisioning.

How did things change?

Answers will vary. Students will use this as an opportunity to grow their skills in envisioning.

What was the benefit to each stakeholder from the change?

Answers will vary. Students will use this as an opportunity to grow their skills in envisioning.