

Critical Reflection

"We had the experience but missed the meaning"

Eliot, T. S. (1943) *The Four Quartets*

Reclaiming Reflection

[*Setting aside the baggage associated with "reflection"*]

"Reflection"

"Critical reflection"

"active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends"

[Dewey, 1910]

"intentional consideration of an experience in light of particular learning objectives"

[Hatcher & Bringle, 1997]

Critical Reflection ...

1) generates

2) deepens

3) documents

learning

and

improves the quality of practice, partnerships, and inquiry

DEAL Model Critical Thinking Standards Table excerpts (Ash & Clayton, 2009; various)

[Critical Thinking Standards from Paul, R & Elder, L. (2001). The miniature guide to critical thinking: Concepts and tools. Santa Rosa, CA: The Foundation for Critical Thinking.

www.criticalthinking.org]

Critical Thinking Standard	Description	Associated questions to ask to check your thinking
Clarity	<i>Expands on ideas</i> , express ideas in another way, <i>provides examples</i> or illustrations where appropriate.	<ul style="list-style-type: none"> Did I give an example? Is it clear what I mean by this? Could I elaborate further?
Accuracy	All statements are <i>factually correct</i> and/or <i>supported with evidence</i> .	<ul style="list-style-type: none"> How do I know this? Is this true? How could I check on this or verify it?
Precision	Statements contain <i>specific information</i>	<ul style="list-style-type: none"> Can I be more specific? Have I provided sufficient detail?
Relevance	All statements are <i>relevant to the question</i> at hand; all statements connect to the central point.	<ul style="list-style-type: none"> How does this relate to the issue being discussed? How does this help us/me deal with the issue being discussed?
Depth	<i>Explains the reasons behind conclusions</i> and <i>anticipates</i> and <i>answers the questions</i> that the reasoning raises and/or <i>acknowledges the complexity</i> of the issue.	<ul style="list-style-type: none"> Why is this so? What are some of the complexities here? What would it take for this to happen? Would this be easy to do?
Breadth	<i>Considers alternative points of view</i> or how someone else might have interpreted the situation.	<ul style="list-style-type: none"> Would this look the same from the perspective of.... ? Is there another way to interpret what this means?
Logic	The <i>line of reasoning</i> makes sense and follows from the facts and/or what has been said.	<ul style="list-style-type: none"> Does what I said at the beginning fit with what I concluded at the end? Do my conclusions match the evidence that I have presented?"
Significance	The conclusions or goals represent a (the) <i>major issue</i> raised by the reflection on experience.	<ul style="list-style-type: none"> Is this the most important issue to focus on? Is this most significant problem to consider?
Fairness	<i>Other points of view</i> are represented with <i>integrity</i> (without bias or distortion)	<ul style="list-style-type: none"> Have I represented this viewpoint in such a way that the person who holds it would agree with my characterization?

"Everybody knows that smoking is bad, so parents shouldn't smoke when they have children; those parents who do smoke [\leftarrow *experience = seeing parent smoking*] obviously just don't care about their kids."

"It became clear that the more we got to know the kids and showed them that we actually cared about them, the more willing they were to pay attention to us and their homework. For example, when I first started working with William, he wouldn't even look at me or acknowledge my presence. But every week I brought him little gifts, like candy and stickers, and slowly he began to warm up to me so that now he runs up when I come in and is ready to get to work... This matters because underprivileged children are not getting the attention that they need at home...."

Example Critical Reflection Assignment #1 (structured using DEAL)

ACTIVITY / EXPERIENCE: Grass counting activity instructions

Specific Objective. Bring back your best estimate of the number of blades of grass in the area mapped on the reverse and a list of reasons why your estimate may not be a good one. Allocate your time among planning, data collection, calculations, etc. as you wish. You need to be back in the classroom and ready to present results and debrief by ****time to be announced**** at the latest.

Method. Your choice. If you have a question about how to proceed, write down the question, make a decision, write down the decision, and carry on!

Describe what we have done so far in this class period –
Who? What? When? Where? How?

Examine that experience

- How many different **sampling approaches** were taken? Which groups used *haphazard sampling* and which used *random sampling*? Why did each group use its chosen approach to sampling? What difference does the choice between these 2 approaches seem to make? Do we think that one or the other was the “better” choice, and if so which and why?
- How did you **collaborate** on this project? How did you decide how to collaborate? What other approaches to collaboration might have been taken and what might have been different because of them? What are the relationships between choice of how to collaborate and quality of results (consider sample size, precision)?
- Within each group what specific **roles / functions** did each student take on? Why did each of you take these on rather than others? Are there any other roles / functions that should have been taken on? Why weren’t they?
- What did each group **count** as a blade of grass? What did you not count? How did you make that determination? Was there low, medium, or high agreement across the groups on what to count as grass? Why? What difference does it make?

Articulate Learning (twice, related to any two of these – bold above -- learning goals)

“I learned that” ... Express an important learning, not a statement of fact and not only in the context of the experience

“I learned this when” Connect the learning to specific activities that gave rise to it

“This learning matters because” ... Consider how the learning has value, in this situation and in broader terms

“In light of this learning I will ” ... Set specific, assessable goals; consider benefits and challenges involved

Example Critical Reflection Assignment #2 (structured using DEAL & Bloom)

Describe the experience (objectively and in some detail)

- When did this experience take place? Where did it take place?
- Who else was there? Who wasn't there?
- What did I do? What did others do? What actions did I / we take? What did I / we communicate?
- Who didn't speak or act? Did I / others laugh, cry, make a face, etc.?
- Etc

Examine the experience [Learning goal: Better understand communication dynamics]

1. Brainstorm all the forms of communication we have been discussing in class and be sure I can explain each in my own words
2. What forms of communication did I use in this experience? What forms of communication did others use? What are some examples of forms of communication that no one used?
3. Why do I think these forms were and were not used? What led to them being used? What were the results of using these forms of communication? How might the results have been different had different forms of communication been used?
4. What similarities were there in how various individuals communicated? What differences?
5. AUTHOR suggests that non-verbal communication can be more influential than verbal communication. In what ways does that hold in this experience? In what ways does it not?
6. What were the most effective / ineffective forms of communication used? What do I mean by effective in this case? What is my evidence for how effective they were? What conditions made these forms of communication effective / ineffective? What conditions would have had to be different to increase the level of effectiveness of some of these forms of communication?
7. Looking back on it, is there another form of communication I wish I had used or used more effectively? Why or why not?

Articulate Learning [about communication dynamics]

"I learned that" ...

- Express an important learning, not just a statement of fact
- Provide a clear and correct explanation of the ideas(s) in question so that someone not in the experience could understand it.
- Explain your enhanced understanding of the ideas(s), as a result of reflection on the experience
- Be expressed in general terms, not just in the context of the experience (so that the learning can be applied more broadly to other experiences)

"I learned this when"

- Connect the learning to specific activities (experience and critical reflection) that gave rise to it, making clear what happened in the context of that experience so that someone who wasn't there could understand it.

"This learning matters because" ...

- Consider how the learning has value, both in terms of this situation and in broader terms, such as other organizations, communities, activities, issues, professional goals, courses, etc.

"In light of this learning" ...

- Set specific and assessable goals; consider the benefits and challenges involved in fulfilling them
- Tie back clearly to the original learning statement.

Integrating Critical Reflection and Assessment of Student Learning

.... self-report

	Strongly disagree			Strongly agree		
I often find it difficult to provide evidence in support of my position. (accuracy)	1	2	3	4	5	6
I usually examine complex issues from multiple perspectives before reaching my own judgment. (breadth)	1	2	3	4	5	6
I usually express ideas that I disagree with in a way that those who believe them think is fair to their position. (fairness)	1	2	3	4	5	6

.... authentic evidence

DEAL Model Critical Thinking Rubric excerpts (Ash & Clayton, 2009; various)

[Critical Thinking Standards from Paul, R & Elder, L. (2001). The miniature guide to critical thinking: Concepts and tools. Santa Rosa, CA: The Foundation for Critical Thinking.

www.criticalthinking.org]

	1	2	3	4
Accuracy	Consistently makes inaccurate statements and/or fails to provide supporting evidence for claims	Makes several inaccurate statements and/or supports few statements with evidence	Usually but not always makes statements that are accurate and well-supported with evidence	Consistently makes statements that are accurate and well-supported with evidence
Clarity	Consistently fails to provide examples, to illustrate points, to define terms, and/or to express ideas in other ways	Only occasionally provides examples, illustrates points, defines terms, and/or expresses ideas in other ways	Usually but not always provides examples, illustrates points, defines terms, and/or expresses ideas in other ways	Consistently provides examples, illustrates points, defines terms, and/or expresses ideas in other ways
Depth	Fails to address salient questions that arise from statements being made; consistently over-simplifies when making connections; fails to consider any of the complexities of the issue	Addresses few of the salient questions that arise from statements being made; often over-simplifies when making connections; considers little of the complexity of the issue	Addresses some but not all of the salient questions that arise from statements being made; rarely over-simplifies when making connections; considers some but not all of the full complexity of the issue	Thoroughly addresses salient questions that arise from statements being made; avoids over-simplifying when making connections; considers the full complexity of the issue
Breadth	Ignores or superficially considers alternative points of view and/or interpretations	Gives minimal consideration to alternative points of view and/or interpretations and makes very limited use of them in shaping the learning	Gives some consideration to alternative points of view and/or interpretations and makes some use of them in shaping the learning	Gives meaningful consideration to alternative points of view and/or interpretations and makes very good use of them in shaping the learning
Fairness	Consistently represents others' perspectives in a biased or distorted way	Occasionally represents others' perspectives in a biased or distorted way	Often but not always represents others' perspectives with integrity	Consistently represents others' perspectives with integrity (without bias or distortion)

Critical Reflection Product: Personal Growth Category (as written)

[NOTE: Produced as the last step in a critical reflection process that combined oral and written reflection using the DEAL Model; first draft]

I learned that when working with other people I try not to impose on them by making them feel any unwanted sense of commitment or obligation to do extra work. I feel that this has become a weakness for me because it creates some uncertainty surrounding my interactions with others by not fostering the formation of well-defined goals and firm deadlines.

I learned this by looking back at e-mails and letters I have recently written to people and seeing how open-ended I leave them. Karen (my fellow SL group member) pointed out to me that Ms. Black said about the letter that I gave her that she was not sure what needed to be done with it. In looking at that letter and the ones we gave to Dr. Jones (the principal at the school) and Sue (the parent we are partnering with), I realized that that there was only one mention of any action that needed to be taken, and even that was not emphasized. Because I have not heard back from neither Dr. Jones nor Sue and only heard from Ms. Black because I directly approached her, it is a fair assessment to say that the letter did not lay out my goals and purpose clearly enough to push these people toward action.

This learning matters because I have seen that my hesitancy to directly ask people to perform a task or even to merely provide a response has negatively affected my interactions with others by limiting my productivity because of a lack of directedness, which might be further complicated if people interpret this lack of forcefulness as a sign of me having little passion for the project and thus not motivating them to action or possibly not establishing reliable communication to give them the opportunity to take part in the process. However, this can also be looked at as a strength when operating within the model of service-learning because this tendency to refrain from imposing on others should ensure that I do not overstep my bounds and take full control of the project and neglect the community partners' wishes.

In the future, I will try to be more goal-directed in my correspondences with others and try to establish a sense of accountability on their side of the partnership so that we may work in a reciprocal relationship where I can clearly lay out our goals and deadlines while also respecting the individual and his or her input. While the line between being too forceful and being respectful of the individual is blurry, I believe it comes when both parties are not receiving mutual benefits from the partnership and when any member of the partnership drowns someone's voice out. Setting reasonable deadlines for replies or steps toward action when asking for assistance is a solution, but when doing this, I will need to remain conscious of when my aversion for imposing on others is hindering my intentions to be more forceful.

DEAL Bloom-based Rubric for Personal Growth

1	2	3	4	5	6
Identifies a personal characteristic that you now understand better as a result of reflection on experience	Explains the personal characteristic (so that someone who does not know you would understand it)	Applies: Considers how this personal characteristic emerges in your experience (e.g., When did you see it or note its absence?)	Analyzes the sources of this personal characteristic AND Considers how this personal characteristic does/might affect (positively and/or negatively) your interactions with others, your decisions, and/or your actions in your project and in other areas of your life	Develops the steps necessary to use, improve upon, or otherwise change this personal characteristic in the short term, in the project and in other areas of your life	Evaluates your strategies for personal growth over the long term

Critical Reflection Product: Academic Learning Category (excerpted)

[NOTE: Produced as the last step in a critical reflection process that combined oral and written reflection using the DEAL Model; refined through two drafts, with feedback from peers and instructor] ---- USE FIRST RUBRIC ON NEXT PAGE

One main attribute we have discussed that a servant-leader should have is foresight, or the ability to anticipate what will happen based on patterns observed from the past In "The Servant as Leader," Robert Greenleaf says that foresight is "the 'lead' that the leader has" and that "once he loses this lead and events start to force his hand...he is not leading (18)." However, *I have learned that* although our group has lacked foresight in some aspects of this project and that to a certain extent events are limiting our choices as servant-leaders, we have not totally "lost our lead" ... and we still have the choice of how we will respond to the current status of the project.

I learned this when we discussed the challenges we were experiencing with the project ... We talked about how we were discouraged that our lack of foresight had caused us to waste a lot of time trying to fix technological problems at the sites when we should be working on sustainability for the project. ... We realized that we may not be able to firmly establish a new and permanent "home" program to take on the responsibility of the computer project or fix all the technological problems that still exist at the sites. We felt that we had no choice but to simply give up these objectives—that is, that our lack of foresight had taken away our "lead"—since the pressure we were experiencing from time seemed to be forcing our hand and leaving us no options. However, [our instructor] asked us if not being able to completely fulfill an objective meant that we could not progress towards it at all. This question helped us to realize that while we may not be able to fully complete everything we wanted to with this project, we still can make interim steps towards those goals. We can establish preliminary contact with possible "home" programs for the project and compile a report of these options. We can locate a source of technological support ... for future participants in the project who will be able to take care of the technological problems we cannot fix. In short, our choice of actions at this point may be limited by our lack of foresight earlier on in the project, but we still ... can direct the progress of this project before our involvement with it ends.

This learning matters because it has reinforced both to me and to my group members the importance of foresight when trying to achieve goals and also caused us to find alternate ways of working towards those goals when our lack of foresight brings us into situations of limited options. ... My group and I discovered that we do not agree that lacking foresight causes a leader to "lose [his or her] lead" as Greenleaf states. ... Even though our efforts ... have been compromised by our lack of foresight ... we can utilize other leadership skills to retain our "lead" in this project. We can ... be flexible and learn to work within the limitations that our lack of foresight has resulted in.

In light of this learning I will spend some time after our meeting with the [organization's] manager to foresee what situations may come up in the last five weeks of this project, write these ideas down, and share them with my group members ... Since there are so many challenges and changes that may yet arise in this project, it will be hard to predict them. ... As Greenleaf states, foresight often requires a leader to have a "feel for patterns (15)," and one important way for me to recognize and sense patterns in the progress of this project is by reflecting on my past experiences and current involvement with this project. Also, I can be thinking of what choices still remain for us as we seek to come as close to completing our objectives for this project as possible, and how we can act upon these choices.

Drafting Bloom-based Rubrics (* = sometimes you might flip 5 and 6)

Learning Goal	1 (Identify)	2 (Explain)	3 (Apply: Recognize it when you see it)	4 (Analyze: CCCC = causes and consequences / compare and contrast)	5 (Synthesize / Create) * Sometimes reversed w 6	6 (Evaluate)
<i>Students will understand academic concept (generic)</i>	Identifies a specific academic concept that you now understand better as a result of reflection on experience	Explains the academic concept (so that someone not in your class would understand it)	Applies: Considers how this academic concept emerges in your experience (e.g., When did you see it, or note its absence? How did, or could, you or someone else use it?)	Analyzes: Compares and contrasts your initial understanding of the academic concept with your experience of it OR Compares and contrasts the concept as presented in a text, lecture, etc. with the concept as encountered in your experience	Develops an enhanced understanding of the academic concept in light of the experience (nuances, complexities)	Evaluates the complete-ness of the concept and/or of your understanding of the concept and/or of its use by you or others
<i>Students will understand various ethical theories</i>	Identifies a theory of ethics	Explains that theory in your own words so that someone unfamiliar with it would understand it	Gives an example of the presence or absence of that theory in a particular situation	—	—	—
<i>Students will understand the complexities of relationships between individual rights and the common good</i>	Defines “individual interests/ rights” and “common good”	Explains “individual interests/rights” and “common good” in your own words so that someone unfamiliar with these concepts would understand them	Gives an example of the presence or absence of “individual interests/ rights” and “common good” in a particular situation	Compares and contrasts what an “individual interests/ rights” focus would prioritize in this situation with what a “common good” focus would prioritize	Proposes at least two potential resolutions of the tension between “individual interests/ rights” and “common good” in this situation	Evaluates these potential resolutions in terms of their long-term consequences and justifies your judgment as to the most appropriate resolution accordingly
<i>Thinking from the perspective of the discipline (from Jameson, Clayton, & Ash, 2013)</i>	Identify two or more constructs or theories from the discipline.	Explain those constructs or theories in your own words so that someone not in the discipline could understand	Apply these constructs or theories to a given situation—how would each interpret or explain the situation?	Analyze these constructs or theories through comparing and contrasting the explanations each provides in making meaning of the situation—(e.g., what does one reveal that another obscures)	Synthesize these constructs or theories into a larger, integrated framework, noting the associated tension points.	Evaluate the explanatory power of the larger integrated framework – (e.g., what is enhanced and what is still incomplete)

Learning Goal	1 (Identify)	2 (Explain)	3 (Apply: Recognize it when you see it)	4 (Analyze: CCCC = causes and consequences / compare and contrast)	5 (Synthesize / Create) * Sometimes reversed w 6	6 (Evaluate)
<i>Understand the complexities of access to power (*)</i>	Identify multiple sources of power	Explain these sources of power in my own words such that others who are not familiar with them can understand	Provide examples of the presence and absence of these sources of power in the context of my service-learning project (i.e., who is and is not using power from which sources)	Compare (similar?) & contrast (different?) the access to each of these sources of power experienced by all the stakeholders in the context of my service-learning project, including what enables and what hinders that access and the consequences (positive and negative, short-term and long-term) of that access on the situation overall and on the stakeholders	* Critique the level of equity in access to power sources in this situation (i.e., do stakeholders all have similar levels of access to power? should that be changed and why? what trade-offs would come along with changing it?)	Produce an alternative set of processes to enhance the level of equity in access to power in this situation.

Critical Reflection and Civic Learning: Example Unpacking of Learning Goals

We especially value the following three conceptions of civic learning: (a) *inclusivity*, which has at its core capacities to think beyond the single perspective of one's own worldview and act accordingly; (b) *criticality*, which has at its core capacities to recognize and challenge enshrined structural inequities that limit social justice; and (c) *cocreation*, which has at its core capacities to bring an asset-based orientation to collaboration and to integrate the knowledge, perspectives, and resources of all partners in determining the questions to be addressed, possibilities to be pursued, and strategies for collaborating effectively and with integrity. Table 1.3.1 provides illustrative examples of how we unpack these broad learning goals.

TABLE 1.3.1.
Examples of Unpacking of Civic Learning Goals

<i>Learning Goal</i>	<i>Sample Unpacking per KSA(B/I)</i>	<i>Sample Unpacking per Bloom's Taxonomy</i>
Inclusivity	<p>Skills: listen attentively to unfamiliar or contrary perspectives</p> <p>Attitudes: hold multiple worldviews in tension rather than immediately privileging one over another; curiosity regarding nondominant perspectives</p>	<p>Analysis: compare and contrast one's own and others' worldviews, what has shaped them, and how they influence particular interactions</p>
Criticality	<p>Knowledge: of historical, political, cultural forces that impede equity</p> <p>Attitudes: accept responsibility for how one's choices and actions may reinforce structures that underlie injustice</p> <p>Behaviors: modify one's language so as not to default to using words that assume hierarchy</p>	<p>Analysis: determine the causes and consequences of assumptions (e.g., about knowledge, about power) that underlie various cultural and disciplinary canons</p> <p>Evaluation: critically evaluate levels of equity in access to various sources of power in given contexts</p>
Cocreation	<p>Knowledge: realize the forces within and around us that nurture and hinder cocreation</p> <p>Skills: give and receive constructive critique</p> <p>Identity: see oneself as a cocontributor to the collective shaping of communities through civic action</p>	<p>Application: provide examples of the presence and absence of asset- and deficit-based orientations in a given encounter</p> <p>Evaluation: critically evaluate the influence of concepts from the discipline (e.g., verbal and nonverbal communication) on cocreative dynamics</p>

Example #3: DEAL-Based Critical Reflection Session Framework, excerpts

Describe (objectively)

- When did this experience take place? Where did it take place?
- Who else was there? Who wasn't there?
- What did I do? What did others do? What actions did I / we take? What did I / we communicate?
- Who didn't speak or act? Did I / others laugh, cry, make a face, etc.?

Examine – Academic Learning

- What specific academic material is relevant to this experience? Explain the concept, theory, etc clearly and concisely so that someone unfamiliar with it could understand it. How did the material emerge in the experience (When did I see it or note its absence? How did or should I or someone else use it?) ?
- What academic (e.g., disciplinary, intellectual, professional) skills did I use / should I have used? In what ways did I / others think from the perspective of a particular discipline and with what results?
- In what specific ways are my understanding of the material or skill and the experience the same and in what specific ways are they different? What are the possible reasons for the difference(s) (e.g., bias, assumptions, lack of information on my part or on the part of the author / instructor / community?)

Examine – Civic Learning

- What was I / someone else trying to **accomplish**? Why? In taking the actions I / they did, was the focus on **symptoms** or underlying **causes**? Was the focus (symptom or cause) appropriate to the situation? How might I / they focus more on underlying causes in the future? What trade-offs will be associated with doing so?
- What **roles** did each person / group / organization involved in the situation play and why? What alternative roles could each have played?
- In what ways did differences in **power & privilege** emerge in this experience? What are the sources of power & privilege in this situation? Who benefits and is harmed? How might any inappropriate dependencies be eliminated?
- What is in the interest of the **common good** in this situation? In what ways is the individual good (mine / others) linked to and/or contrary to the common good? What tradeoffs between them are involved?
- How does this experience help me to better understand my partner **organization's vision, mission, and strategies**? What does it reveal about the relationship between the organization and those it serves? What does it suggest about how this relationship might be improved?

Examine – Personal Growth

- What **assumptions** or expectations did I bring to the situation? How did they affect what I did or didn't think, feel, decide, or do? To what extent did they prove true? If they did not prove true, why was there a discrepancy?
- How did this experience make me **feel**? Why? How did I handle my emotional reactions (e.g., What did I do as a result of my feelings? Was I in control of my feelings?)? Should I have felt differently? Why or why not?
- In what ways did I **succeed** or do well in this situation (e.g., interacting with others, accomplishing tasks, handling difficulties) and what personal characteristics helped me to be successful (e.g., skills, abilities, perspectives, attitudes, tendencies, knowledge)? In what ways did I experience **difficulties** (e.g., interacting with others, accomplishing tasks,) and what personal characteristics contributed to the difficulties (e.g., skills, abilities, perspectives, attitudes, tendencies, knowledge)?
- How did I **interpret** the thoughts, feelings, decisions, and/or behaviors of others [e.g., How do I think others felt? What assumptions and expectations do I think others brought to the situation (including their assumptions about me)]? What evidence do I have that my interpretations were or were not accurate?

Articulate Learning (in each category)

"I learned that" ... Express an important learning, not a statement of fact and not only in the context of the experience

"I learned this when" Connect the learning to specific activities and critical reflection that gave rise to it

"This learning matters because" ... Consider how the learning has value, in this situation and in broader terms

"In light of this learning I will" ... Set specific, assessable goals; consider benefits and challenges involved

Example Critical Reflection Assignment #4:

Let's Go Take a Walk and Think Like Mountains (to the tune of "Let's Go Fly A Kite" from Mary Poppins)

Describe our experience of walking around campus during class this morning (see generic "Describe" prompts and develop as needed)

Examine that experience

In A Sand County Almanac, Aldo Leopold writes: *The cowman who cleans his range of wolves does not realize that he is taking over the wolf's job of trimming the herd to fit the range. He has not learned to think like a mountain. Hence we have dustbowls, and rivers washing the future into the sea.... Perhaps this is behind Thoreau's dictum: In wildness is the salvation of the world. Perhaps this is the hidden meaning in the howl of the wolf, long known among mountains, but seldom perceived among men.*

1. Individually: What do you think Leopold means by "think like a mountain"? Come up with 3 distinct possible interpretations and draw each of them on a large sticky note. Place your sticky notes on the piece of flip chart paper provided.
2. As a group: Share your 3 possible interpretations with one another. Organize the full set of sticky notes into clusters of similar interpretations and label each cluster. Divvy up the resultant clusters across pairs in your group.
3. As a pair:
 - a. Note specific examples of what you encountered on our walk that suggest the influence of each of your interpretations (clusters).
 - b. Note specific examples of what you encountered that suggest that each of your interpretations (clusters) has not been influential.
 - c. What might explain the difference between the ways in which thinking like a mountain seems to have – and seems not to have – been influential in various aspects of what we encountered on campus this morning? (e.g., extent of planning; interference of other forces)
4. Individually, drawing on your discussion in pairs: What metaphor would you use to convey your best understanding of "thinking like a mountain" to your peers if you were trying to encourage it? Draw it on another large sticky note and add it to your group's flip chart.
5. As a group: Share your metaphors with each other. Come up with an integrated metaphor that draws on each of your individual metaphors and represents your group's consensus regarding how best to convey the idea to your peers in a way that encourages its adoption. Present your integrated metaphor to the rest of the class.

Articulate Learning (about "thinking like a mountain")

- I learned that
- I learned it through/when/by ...
- It matters because ...
- In light of this learning I will ...

Example Critical Reflection Assignment #5 (structured using DEAL & Bloom)

Describe the experience (objectively and in some detail)

- When did this experience take place? Where did it take place?
- Who else was there? Who wasn't there?
- What did I do? What did others do? What actions did I / we take? What did I / we communicate?
- Who didn't speak or act? Did I / others laugh, cry, make a face, etc.?
- Etc

Examine the experience [*Learning goal for this example: Better understand sources of power*]

1. Based on our readings/discussions to date, individually identify 2 sources of power (write each on a card)
2. What do each of these mean (explain each, in your own words, on its index card)?
3. Combine your index cards with those of your neighbor. For each unique index card: Who held power in this experience from that source? Which of these power sources, if any, were not present?
4. Discuss with your neighbor: Did anyone in this experience hold power that derives from other sources besides these? Who and what might those sources be?
5. Together, produce a set of index cards that represents all of the sources of the power present in this experience.
6. Together, put this full set of index cards in order, left to right, from the least influential to the most influential sources of power in this experience.
 - a. Which of the least influential sources of power do you think should have been more influential and why?
 - b. Which of the most influential sources of power do you think should have been less influential and why?
 - c. What would have to have been different for the re-ordering you judge best to have actually happened? Think about what would have had to have been different within individuals, within relationships, within organizations, within cultures, etc.

Articulate Learning [*about sources of power*]

"I learned that" ...

- Express an important learning, not just a statement of fact
- Provide a clear and correct explanation of the concept(s) in question so that someone not in the experience could understand it.
- Explain your enhanced understanding of the concept(s), as a result of reflection on the experience
- Be expressed in general terms, not just in the context of the experience (so that the learning can be applied more broadly to other experiences)

"I learned this when"

- Connect the learning to specific activities that gave rise to it, making clear what happened in the context of that experience so that someone who wasn't there could understand it.

"This learning matters because" ...

- Consider how the learning has value, both in terms of this situation and in broader terms, such as other organizations, communities, activities, issues, professional goals, courses, etc.

"In light of this learning" ...

- Set specific and assessable goals; consider the benefits and challenges involved in fulfilling them
- Tie back clearly to the original learning statement.

Example Critical Reflection Assignment #7 (structured using DEAL; extended; music)

This critical reflection activity will help us to think more about one of the principles of ethical and civic responsibility we have been examining: empathy. It has 5 parts, which will be spread over two weeks, and uses the DEAL Model of Critical Reflection that we have been working with this semester. As you think and write and talk with your group members in response to these prompts, remember to use the Standards of Critical Thinking to help deepen your reasoning. Please submit Part I, Part III, and Part Vb (your Articulated Learning). You will have the opportunity to revise (Part VI) your Articulated Learning (AL) in response to feedback per the Critical Thinking and Academic Learning rubrics, which will also be used to grade your final AL.

Part I:

- a) Write a paragraph explaining what the word “empathy” means to you, drawing on your own life experience as well as on our discussions and readings to date (quote and cite as appropriate). Write as if you are conveying your current best understanding of empathy to someone who has not been part of our class.
- b) Then listen to John Denver sing “So You Say the Battle is Over.” On a scale of 1 (not at all) to 10 (completely), to what extent does your understanding of empathy (“a”) emerge in this song (consider both what the writer/singer himself experiences and what he might be trying to evoke in listeners)? Explain your judgment in a paragraph, with specific references to both the song and what you wrote in “a.”
- c) Empathy understood as **sadness**—experienced-along-with-someone-in-distress—has long been studied as a catalyst to taking action on behalf of others. More recently, however, the notion of empathy experienced as anger on behalf of another’s distress or victimization (“**empathic anger**”) has begun to be investigated as a catalyst to taking action. In what ways do you interpret John Denver’s song in terms of “empathic sadness” and in what ways do you interpret it in terms of “empathic anger”?

Part II: During your time with your service-learning community partners this week

- a) Be on the lookout for expressions of empathy (as either or both sadness and anger). If it is appropriate, confirm whether what you are observing is, in fact, empathy and try to learn more about it.
- b) Note any other forms of empathy you observe (besides sadness or anger).
- c) Note any moments in which you yourself experience empathy. Empathy-as-sadness? Empathic anger? Other?

Part III (begin use of DEAL):

- a) Guided by the prompts in Chapter 5 of *Learning through Critical Reflection*, DESCRIBE your service-learning experience last week, objectively and in detail
- b) EXAMINE that experience through the lens of your thinking in Part I and Part II about empathy:
 - i. Do you believe that others you encountered experienced empathy? If so, empathy-as-sadness, empathic anger, or other? What do you think triggered their experience(s) of empathy?
 - ii. Did you yourself experience empathy? If so, empathy-as-sadness, empathic anger, or other? What do you think triggered your experience(s) of empathy?
 - iii. In what specific ways are empathy (others’; yours) as it emerged in your SL experience last week and empathy as you discussed it in Part I (a, b, and c) similar? Different?

Part IV: Find another song (or perhaps poem) that you believe expresses and/or evokes empathy. Listen to it (and bring it to class on Tuesday). Be prepared to share in what specific ways is it similar to and different from “So You Say the Battle is Over” in terms of being an expression and/or attempting to evoke empathy (as sadness; as anger; other)?

Part V (continue use of DEAL):

- a) In your SL project groups (in class on Tuesday), share the song (or poem) you found.
- b) EXAMINE: After all four songs/poems have been shared:
 - i. Discuss the ways in which you find them to be (or not to be) expressions of or attempts to evoke empathy (sadness; anger; other).
 - ii. In what specific ways are empathy (others'; yours) as it emerged in your experience last week and empathy as you find it in these songs (or poems) similar? Different?
 - iii. Determine and discuss which of the songs (Denver's, the one you found, the ones your group members found) is least and most likely to serve as a catalyst for each of you to act on behalf of others. What are some of the similarities and differences in the ways you and your group members experience empathy as a catalyst to action?
 - iv. In light of this discussion, if you wanted to catalyze a friend to action related to the community issue your service-learning project addresses, would you try to evoke empathy-as-sadness or empathic anger (or other)? Why? And what, specifically, might you do to evoke that empathy?
- c) As homework on Tuesday night, ARTICULATE a LEARNING about empathy (begin by looking back at the paragraph about empathy you wrote in Part Ia and considering any changes in your understanding since then), using the following format:

“I learned that” ...

- Express an important learning, not just a statement of fact
- Provide a clear and correct explanation of the concept(s) in question so that someone not in the experience could understand it.
- Explain your enhanced understanding of the concept(s), as a result of reflection on the experience
- Be expressed in general terms, not just in the context of the experience (so that the learning can be applied more broadly to other experiences)

“I learned this when” Connect the learning to specific activities that gave rise to it, making clear what happened in the context of that experience so that someone who wasn't there could understand it.

“This learning matters because” ... Consider how the learning has value, both in terms of this situation and in broader terms, such as other organizations, communities, activities, issues, professional goals, courses, etc.

“In light of this learning” ...

- Set specific and assessable goals; consider the benefits and challenges involved in fulfilling them
- Tie back clearly to the original learning statement.

Part VI: Revise your Articulated Learning and resubmit the final version along with the first draft (with feedback). Attach a half-page explanation of your revisions; conclude that half-page with one question you would like most like to continue exploring as you think more about empathy as a principle of ethical and civic responsibility.

Civic Learning Goal: _____

Knowledge	Skills	Attitudes / Values / Dispositions

Draft a Critical Reflection Assignment (structured using DEAL)

Describe the experience (objectively and in some detail)

- When did this experience take place? Where did it take place?
- Who else was there? Who wasn't there?
- What did I do? What did others do? What actions did I / we take? What did I / we communicate?
- Who didn't speak or act? Did I / others laugh, cry, make a face, etc.?
- Etc

Examine the experience [*Learning goal(s):* _____]

Articulate Learning

"I learned that" ... Express an important learning, not a statement of fact and not only in the context of the experience

"I learned this when" Connect the learning to specific activities and critical reflection that gave rise to it

"This learning matters because" ... Consider how the learning has value, in this situation and in broader terms

"In light of this learning I will " ... Set specific, assessable goals; consider benefits and challenges involved

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