

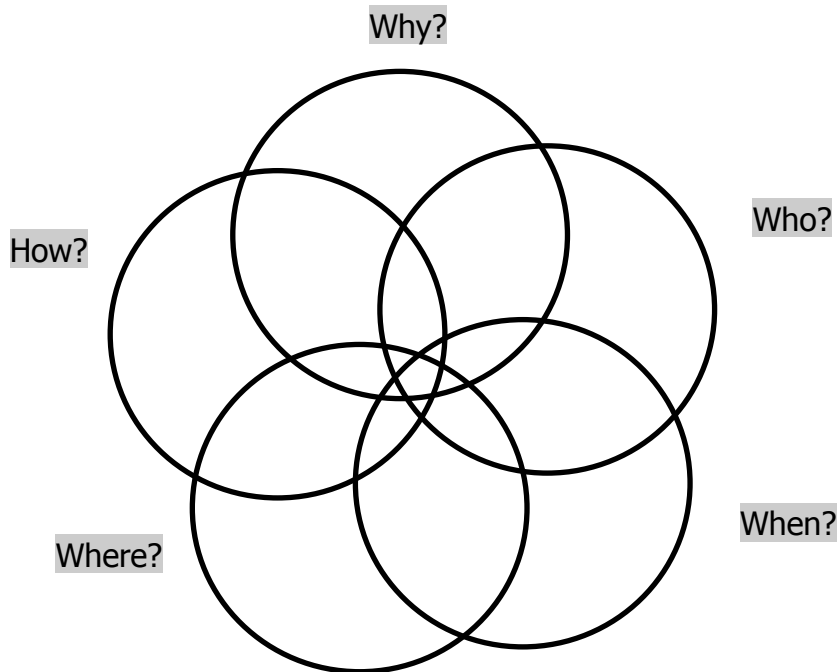
## Critical Reflection

*“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]*

*generates, deepens, and documents learning  
&  
improves the quality of practice, partnerships, and inquiry [P. Clayton]*

### Designing Critical Reflection (strategies and mechanisms)



# Designing Critical Reflection: The DEAL Model

## Example #1 (excerpted from in-class “first day” activity; G. Hess & P. Clayton)

### 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? Etc.

**Examine** that experience [*per learning goals: bold terms below for this assignment’s 4 learning goals*]

- 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 #2 (in-class activity; “E” prompts structured per Bloom’s Taxonomy)

### **D**escribe 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

### **E**xamine 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?

### **A**rticulate **L**earning [*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.

## Example #3 (excerpted from Reflection Session Framework)

### 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 of the 3 categories)

**"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

## Draft a critical reflection assignment (structured using DEAL)

### **D**escribe 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

### **E**xamine the experience [*Learning goal:* \_\_\_\_\_]

### **A**rticulate **L**earning

*"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

**Guided Journal (not using DEAL)**  
**Critical reflection strategy in Patti's course on environmental ethics**  
**[NOTE: Think of each entry as its own reflection mechanism]**

Each student will keep a running journal throughout the semester. The focus of the journal will be a particular nonhuman animal, a plant or type of plant, or a natural setting / place. The purpose of the journal is to help focus your attention on the role and significance of the selected animal/plant/place (and, indirectly, the natural world in general) in your life. Reserve Reading #1 (Bass) should be considered a model for the type of personal reflection the journal is to be a vehicle for.

You will add new sections to the journal continually throughout the semester, with periodic feedback from the instructor; and you will submit the complete, attractively bound journal for grading at the end of the semester; single-spaced type, photographs, drawings, poems, etc. are all encouraged as is going beyond the particular questions posed here in your reflection. The criteria for evaluation include depth of reflection, quality of linkages to course materials, and extent to which personal insights / experiences are developed and integrated. One single-spaced page per entry should be considered the minimum length, and you should set aside approx 1 hour to compose the first draft of each entry, with additional time to revise the drafts.

Part I: Identify the animal/plant/place selected as the focus of your journal. Explain your selection: Why is this particular animal/plant/place important to you? How is your relationship with it different than your relationship with other animals/plants/places that you did not select? In general terms, what does this relationship add to your life? Share at least one specific story from this relationship.

Part II: Spend some time with the animal/plant/place: look, touch, smell, listen. Describe in detail. Who IS this entity that you have this relationship with? What intellectual and emotional responses accompany your reflection? What specific memories, stories does this reflection elicit? (If you are unable to visit with your journal focus this semester, bring out photographs or recall vivid memories.)

Part III: Respond to the Bass reading. What memories, images, thoughts of your animal/plant/place do his stories bring to mind? In what ways are your experiences with this animal/plant/place similar to and/or different from the experiences Bass relates and why? This entry should include specific relevant quotes from Bass.

Part IV: Using as a model the "Others" reading, write a similar letter from your animal/plant/place to you. Put yourself in his/her/its place and creatively try to capture his/her/its perspective, his/her/its end of the relationship, his/ her/its interests and desires, his/her/its understanding of what the two of you bring to one another's existence, etc.

Part V: To what extent and in what ways does your relationship with this animal/plant/place shape your *personal identity*? How would you be different as a person without this relationship? What are the most important lessons you have learned from this animal/plant/place and from your relationship with him or her? Again, share specific stories.

Part VI: To what extent and in what ways is this animal/plant/place an important part of your sense of *family and community*? How do you interact differently with others (human or nonhuman) because of what you have learned or ways you have grown in this relationship? Again, share specific stories.

Part VII: Think of a difficult question or issue you are facing in your life at the present time (or one you expect to face in the near future ... for example, how to deal with a conflict in your family, whether you plan to have a child, what you want to major in, whether you want to go to graduate school, problems you face at work, choosing a career field, an issue in a personal relationship, etc.). In your mind, take this issue to your journal focus and explore it there, with him/her/it. Then reflect on the issue from this virtual perspective (how do you think about the issue differently when you locate it here with your journal focus? does the resolution seem clearer or more difficult? what insights does this perspective bring to your thinking about the issue? etc.).

Part VIII: Respond to the environmental values discussion in general. What values are particularly associated with this animal/plant/place (or his or her species, or this type of place) -- in your own mind? in our society at large? What values would you draw on in order to convince someone to change the way they interact with this animal/plant/place?

Part IX: Interview someone who has a relationship with a similar animal/plant/place. How does this person view his or her relationship and how does this compare and contrast to your own experience? What do you think accounts for the similarities and differences? What do you most like or admire about this person's experience in his or her relationship, and what about it, if anything, concerns you?

Part X: **CAPSTONE ENTRY** Bass writes that "the land, and our stories, have marked us" and shares several examples of how his encounters with the Texas hill country have helped to form his understanding of, respect for, and treatment of the more-than-human world. In this capstone journal entry, you too are to tell your "story" (who you are, what you care about, what you most value, what you believe in, etc.) as it is a produce of your relationship with this animal/plant/place.

The specific question to launch this capstone entry is this: in what ways is your own environmental ethic a product of this relationship?

So, you will first need to identify elements of your personal environmental ethic, drawing on course material in compare / contrast mode to so (noting, for example, which of the specific ideas we have encountered this semester you find most meaningful in your own life and which you find least relevant) but not limiting yourself to concepts we have explored this semester if there are other elements of your environmental ethic which we have not touched on. You will need to identify and explain at least 5 such elements of your personal environmental ethic.

Then you will need to relate each of these elements of your personal environmental ethic to your relationship with your journal focus, identifying specific ways in which these elements have been shaped by this relationship. For example, perhaps you find the preservationist position more meaningful than the conservationist position and you can in part trace this element to an encounter with your journal focus at which point you appreciated his/her/its intrinsic value and began to question the anthropocentrism of your society. Or, for example, perhaps you find Taylor's Rule of Fidelity meaningful in part because you once deceived your journal focus and then regretted having done so.

Once you have explored the extent to which this relationship has helped to shape your personal environmental ethic, move beyond this one relationship and consider how elements of your personal environmental ethic have been shaped by other relationships and experiences, with humans and non-humans alike. For example, perhaps you believe that respect for life suggests (or does not suggest) ending a life filled with suffering, whether a human or a nonhuman life, because of an experience you had watching a grandparent suffer through a terminal illness without recourse to euthanasia. Or, for example, perhaps you place great emphasis on the bequest value of the more-than-human world, not because of your relationship with your journal focus but because you grew up on a family farm and want to pass this experience along to your own children.

Conclude this capstone journal entry with an overview of the ways in which this personal environmental ethic will shape your life after this course. How, specifically, would you like your life to manifest the elements of your personal environmental ethic which you have been exploring here? What steps will you take to bring your choices more in line with your personal environmental ethic?

This capstone journal entry should be more involved and thus longer than the previous entries. A bit of repetition from earlier entries is acceptable (for example, you may reference here a particular story you shared in an earlier entry if it is pertinent to your discussion). Feel free to explore here any aspects of our course you have not touched on earlier in the journal.

## Using short readings in critical reflection

- What learning goals/objectives can you cultivate through critical reflection that includes this essay?
- Would you have your students reflect critically ON the essay or ON experience through the lens of the essay or BOTH or OTHER?
- When in your overall critical reflection strategy might you use a critical reflection mechanism that includes this essay?
- Draft some EXAMINE prompts (or other prompts if you are not using DEAL) that help generate the learning you are after through use of this essay.
- What other essays, readings, video clips, poems, songs, pieces of art, etc etc etc does this bring to mind as others to use in critical reflection, given your learning goals/objectives?

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### I Rescued a Human Today (Janine Allen)

*Her eyes met mine as she walked down the corridor peering apprehensively into the kennels. I felt her need instantly and knew I had to help her.*

*I wagged my tail, not too exuberantly, so she wouldn't be afraid. As she stopped at my kennel I blocked her view from a little accident I had in the back of my cage. I didn't want her to know that I hadn't been walked today. Sometimes the overworked shelter keepers get too busy and I didn't want her to think poorly of them.*

*As she read my kennel card I hoped that she wouldn't feel sad about my past. I only have the future to look forward to and want to make a difference in someone's life.*

*She got down on her knees and made little kissy sounds at me. I shoved my shoulder and side of my head up against the bars to comfort her. Gentle fingertips caressed my neck; she was desperate for companionship. A tear fell down her cheek and I raised my paw to assure her that all would be well. Soon my kennel door opened and her smile was so bright that I instantly jumped into her arms.*

*I would promise to keep her safe.*

*I would promise to always be by her side.*

*I would promise to do everything I could to see that radiant smile and sparkle in her eyes.*

*I was so fortunate that she came down my corridor. So many more are out there who haven't walked the corridors. So many more to be saved. At least I could save one.*

*I rescued a human today.*