

Making the Connection: Critical Thinking and Reflection Activities to Connect Theory and Practice in Experiential Learning

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This toolkit is a collection of resources to assist you with two important aspects of teaching your experiential course a) guiding your students to make the cognitive connections between the theories/concepts covered in the course and the concrete experiences you have structured for them, and b) assessing what students are learning from the experiential components in order to build on this knowledge or clarify points as needed.

The connecting activities are drawn from Brandeis faculty as well as from the literature on experiential learning and on assessment. They were selected because they have the potential for adaptation in multiple kinds of courses and areas of study. As faculty review this toolkit and join in an ongoing exchange of resources, the collection will expand to incorporate the new ideas. Please visit www.brandeis.edu/experientiallearning to access the latest updates of the toolkit. There is also a supplementary toolkit for reflection activities which are particularly effective for courses involving community-based learning projects or service-learning. To download this toolkit visit www.brandeis.edu/servicelearning.

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I. Critical Role of Structured Reflection or “Connecting Activities” in Experiential Learning

This toolkit is designed to provide examples of teaching strategies which fulfill the principles of best practices for using reflection to connect theory and practice in experiential learning. These reflection activities should also be considered as part of ongoing assessment of student learning. Each time students express how they are processing an experience and what learning they draw from it, this is feedback about the level of student understanding and about the overall quality of the experience. Thus, planning a thoughtful series of reflection activities throughout a course provides a formative assessment structure in which faculty collect data, interpret the results, adjust teaching strategies as needed, and collect more data. This approach assists faculty to more closely examine the progression of student learning and to make informed decisions in planning which activities to include in future versions of a course.

Reflection involves the metacognitive processes of detachment from the direct involvement in an experience in order to analyze and think critically about what happened. Since the writings of John Dewey, the scholarship on experiential learning has continued to identify the reflection component as critical to the educational value of concrete experience. David A. Kolb, the psychologist considered the intellectual founder of the modern field of experiential learning, proposed that the process of experiential learning flows through a cycle which includes concrete experience, *reflective observation*, *abstract conceptualization* and active ey, Kurt Lewin, and Jean Piaget.

Subsequent research focused on particular types of experiential learning has continued to reinforce the importance of reflection. In the field of internships, David Moore’s studies of student learning in courses which require internships revealed the need for faculty to provide clear guidelines and structures for the students to make connections between their direct experiences and the course themes and theories (Bailey, Hughes and Moore, 2004). In the fields of community-based learning and service-learning, a significant body of scholarship has developed to validate reflection as the key connector between concrete experience and particular learning objectives. Two research teams have been especially significant in developing best principles for reflection. Their recommendations are listed below.

Janet Eyler and Dwight Giles (1999)

Good reflection activities include:

- a) connection between experience and knowledge;
- b) continuity of reflection before, during, and after the service experience;
- c) context of applying subject matter to real life situations;
- d) challenging students’ perspectives; and
- e) coaching and providing emotional support to students.

Robert Bringle and Julie Hatcher (1999)

Effective reflection should:

- a) clearly link the service experience to the course content and learning objectives;
- b) be structured in terms of description, expectations, and the criteria for assessing the activity;
- c) occur regularly during the semester so that students can develop the capacity to engage in deeper and broader examination of issues;
- d) provide feedback from the instructor so that students learn how to improve their critical analysis and reflective practice; and
- e) include the opportunity for students to explore, clarify, and alter their personal values.

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II. Considerations in Planning Connecting Activities

Which activity is most likely to give you the data you need? Should you keep student responses anonymous? Should you grade responses or keep notes on student progress without grading?

Thinking through the points below will guide decisions about such important questions.

- 1) Consider what level of information you want to gather:
 - a) a general sense of whether most students are grasping the material, or
 - b) more specific data on individual progress, or
 - c) deep exploration of the value of a particular E-L activity.

- 2) Consider what priority to give individual feedback to students.

If the goals of your experiential activity revolve around building particular skills which require detailed guidance—

then you may want to plan for providing explicit feedback to clarify points of confusion and to validate what the student did well.

If the goal of the reflection/assessment is to give you data about how effective certain teaching methods are-- then you may want to give credit but not grades for the reflection assignment. This would underscore your intentions to simply find out about the students' experience rather than test their knowledge.

A note about large classes:

It is feasible to conduct all of these activities with large as well as small classes. However, the difference is in the time it takes to provide feedback. Obviously it is more difficult to provide detailed comments on individual journal entries if you have a large class. However, you might decide that journals provide the best means for students in your course to process their learning from experience and in that case you could make a realistic plan to provide focused and brief comments on certain entries. On the other hand, you might decide that without detailed feedback the journals would not be as useful to the students and so you might choose a different activity.

III. Chart of Activities

Activity	Page	Stage	Prep Time*	In-Class Time*	Homework Time*	Writing	Speaking	Doing	Drawing
Analytic Memos	6	Post-Activity	Med	Low-Med	Med-High	X			
Concept Map	7	Any stage	Med	Med	Med-High	X			X
Dynamic List of Questions	9	Mid-Stream	Low	Low	Low	X			
Invented Dialogues	10	Post-Activity	Low	Low-Med	Med-High	X	X		
Journal: Critical Incident	12	Post-Activity	Low	Low	Med-High	X			
Journal: Double-Entry	14	Post-Activity	Low	Low	Med	X			
Journal: Five Questions	11	Post-Activity	Low	Med	Med	X	X		
Learning Contract (to be added)		Preparation							
One Sentence Summary	15	Any stage	Low	Low	Low	X			
Preconception/Misconception	16	Preparation	Low	Low	Med	X			
Reflection Papers (to be added)		Any stage							
Snowball	17	Any stage	Low	Med	Med		X		
Two-Minute Paper	18	Any stage	Low	Low	Low	X			
Projects Developed Over the Course of the Semester (Section V of Toolkit)									
Dance in Time	20	---	---	---	---		X	X	X
You Be the Critic	22	---	---	---	---	X		X	
		---	---	---	---				

*Time needed

Low=Less than 15 minutes

Medium= 15-30 minutes

High=30 minutes and above

Analytic Memos

Source: Angelo and Cross (1993)

Instructor Preparation Time: Medium

Class Time: Low to Medium

Student Time: Medium to High

This is particularly useful for:

- a) challenging students to synthesize the issues and problems encountered in an activity in order to communicate a summary to a given audience
- b) practice in using discipline-specific language.

Overview:

Students write a memo to a specified person or group which details the situation they encountered in their experiential activities and provides an analysis of the issues. The instructor provides a model memo as an example of the format, language and tone which would be appropriate. In addition, the instructor clarifies expectations about particular modes of analysis to use, for example particular theories or analytical lenses which should be applied. If appropriate, the students may be asked to present their own proposed solutions to problems encountered.

Suggestions:

Angelo and Cross offer the following instructions:

“Decide whether you want students to work alone, in pairs, or in small groups. Develop an explicit half-page directions sheet. Specify the students’ role, the identity of the audience, the specific subject to be addressed, the basic analytic approach to be taken, the length limit (usually one or two pages) and the assignment deadline.”

Tips for Assessment:

It may be helpful to create a basic rubric or checklist for assessing each memo in terms of the learning outcomes you are looking for, such as understanding of the issues, ability to apply the relevant theories, ability to articulate the ideas with appropriate language and style.

Possibilities for adaptation: See the Invented Dialogues activity. Role playing or acting out a dialogue could be a preliminary exercise for preparing the memo. Also, students could read and respond to each other’s memo in the role of a policy maker.

Connecting Theory and Practice: Activities

Concept Mapping

Source: Angelo and Cross

Instructor Preparation Time: Medium

Class Time: Medium

Student Time: Medium to High

This is particularly useful for:

- a) playing to the strengths of students who organize their thoughts in designs and/or groups of ideas versus a more traditional outline or essay format
- b) assessing students' ability to identify relationships and connections among ideas

Overview: The instructor asks students to draw a “map” or diagram which represents the networks of connections among key elements related to a particular concept, such as *feminism*. Here is an example presented by Angelo and Cross from a course in Gender Studies.

Ten minutes before the end of the first class meeting, the instructor asked students to draw a concept map focused on the concept of feminism. She directed students to write “feminism” in the center of a blank sheet of paper and, around that center, to add related words or concepts that came to mind. As the professor expected, many of the maps contained what she saw as negative associations. But many others contained a mixture of positive and negative concepts—often very stereotypical ones in either case. To give students feedback, she made up three composite Concept Maps based on their drawings to discuss with the class. She also kept their maps and, throughout her subsequent lectures, referred to ideas and individuals they had mentioned. At midterm, she repeated the exercise and got back much more detailed and coherent Concept Maps.

Here is a set of sample instructions. It is a good idea for the instructor to go through the process first and create a model to use in explaining the instructions to the class.

1. At the top of a blank sheet write the key concept.
2. Brainstorm for a few minutes, writing down terms and short phrases closely related to the key concept. [Here is where the instructions would also reference specific activities from which to draw material].
3. Consider the relationships and connections among the terms you listed in the brainstorm. Plan a way to visually represent all these connections. You might place the key concept in the center of web with lines to connect to themes and examples of the themes. Other ideas include a geographical map, a flow chart to show cause and effect or movement through time, and a chart which sorts ideas into categories.
4. After you have filled in primary associations, move on to second and third levels of association if possible.

Suggestions: In the example described above the instructor chose to use the activity twice to gauge progress over the course of the semester. In this way the activity is similar to the Preconception/Misconception exercise. Yet there are ways to enrich the activity beyond identifying preconceptions or stereotypes. Imagine that the gender studies class has completed several experiential activities such as conducting interviews with people about their

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Concept Maps cont'd

perceptions of feminism, creating portfolios with examples of how the media portrays feminists, and writing about events in their lives which have informed their views on the topic. When the concept mapping assignment follows these experiences then the instructor would challenge students to place data from the interviews and research on their maps in ways that demonstrate their understanding of how these pieces of information relate to themes. In this way students must think about how their own direct experiences connect to the more abstract theories.

Tips for Assessment: Since students will have varying levels of ability in creating drawings or schemata, the focus here is on assessing the level of detail and the logic of the relationships among the details. Can each student make meaning from the collection of data from their experiences in relation to abstract themes and concepts? Do a significant number of students need more guidance in making those connections or is it time to move on?

Possibilities for Adaptation: This activity could be paired with a writing assignment so that students first think through the relationships among concepts by making a map and then write an essay to explain the logic of the map.

Dynamic List of Questions

Source: George and Cowan (1999)

Instructor Preparation Time: Low

Class Time: Low

Student Time: Low

This is particularly useful for:

- a) informing the instructor about confusions and discoveries occurring to learners in the process of an activity
- b) encouraging students to self-assess their learning-in-process

Overview:

As explained by John Cowan, “I originally devised and used this exercise as one in which the students would draw up, before a learning activity, a list of the questions for which they hoped they would obtain answers by the end of the lesson or activity. Then, as the activity proceeded, they would gradually delete [or check them off] questions from it and keep a record of when the question no longer troubled them. I soon discovered that the emergence of new questions and needs during the overall pattern of activity was as significant for the students as the elimination of declared needs. So I got them to *add* as well as *delete* questions—since the emergence of new questions often testified to increased awareness and understanding. At the end of the activity, they would hand me their lists on which I could see the original questions, new questions which had been added, and questions outstanding when the activity concluded.”

Tips for Assessment:

This activity is essentially about assessment. Students are assessing their own understanding as they make these notes. And the method provides at least three types of information for the instructor to use in designing follow-up work.

- 1) the learning goals which students have for an activity
- 2) needs that are still unfulfilled by the end of the activity
- 3) questions that emerge for learners during the event

Possibilities for Adaptation:

In lab courses students might reserve a section of the lab notebook to jot down questions. As the instructor mingles among students he/she can scan the questions or collect afterwards.

This could be an exercise used alongside reading assignments to focus students on what they want to find out in the reading and to alert the instructor to areas where students have confusions.

The list of questions could be kept for the duration of a long project such as an internship to help create a kind of learning log of material for a final paper.

Connecting Theory and Practice: Activities

Invented Dialogues

Source: Angelo and Cross (1993)

Instructor Preparation Time: Low

Class Time: Low [homework] to Medium [with added class time for practicing]

Student Time: Medium to High

This is particularly useful for:

- a) combining both the speaking mode and the writing mode
- b) focusing on acknowledging and addressing differing points of view towards an issue
- c) practicing drawing reasonable inferences from observations

Overview: Students script a short dialogue between two characters on a topic relevant to the concepts being studied. For example, after studying issues of environmental conservation on a college campus and talking with various stakeholders, students might write a dialogue between a facilities maintenance person and an environmental scientist discussing the issue of whether the college should install a particular new technology with the aim of conserving energy. The roles of the characters could be assigned or selected by the students. The dialogue should be based on the students' observations and inferences about the priorities and concerns of people in those roles.

Suggestions: It may be helpful to do a role play activity in class first as a warm-up. Two students or a student and the instructor could take on particular roles and talk through an issue. The rest of the class could offer suggestions as needed.

Tips for Assessment: One way to provide feedback to the students on their work is through peer critiques. During class time the class would listen to a reading of several selected dialogues and discuss the choices the author made. The instructor might insert some pointed questions such as *What evidence did you use to guess that the person would react in that way?* or *What does the tone of that line suggest about the person's feelings on this point?* *What reasons might the person have to feel this way?*

Possibilities for Adaptation: A simplified version of the dialogue would be an interview format in which the student imagines posing a series of questions to a particular character in order that the other person fully explain an issue from his/her perspective. In this way the student only has to imagine how one person would think about the issue.

Structured Journal Assignments

By giving students particular kinds of guidelines for journal entries, instructors can challenge them to think about their experiences in ways they might not otherwise do. You can focus their attention on the specific themes or theories which you would like them to relate to the experiential activities. All of these variations on the journal assignment require very little preparation and can take place either during class or as a homework assignment.

Tips for Assessment Using Journals: It is useful to use the same journal assignment several times during a semester: first as a means to reflect in preparation for an activity, second as a debrief of the activity and third as an opportunity to review and reflect with new perspectives towards the end of the course. The preparatory journal entry provides an opportunity for students to practice following specific directions about what to include and for you to give feedback which will help them in their next attempt. Students should demonstrate increasing sophistication in their entries over the course of the semester. For example, they should relate the specific to the general and the experiences to the theories. See a Rubric for Assessing Student Reflection in the appendices for a detailed breakdown of criteria.

Considerations: Plan how much time and effort you can give to feedback. If you can't write an extensive comment on each entry, consider other options such as 1 sentence about the thoughtfulness of the entry and 1 question the entry raised.

Activity: The Five Questions Model for Journaling

Source: Jacobson and Ruddy (2004)

Overview: This activity originated as a guide for facilitating a discussion and it also works for a journal, especially if you participated with the students in the experience so that you can pick out a particular aspect to focus on.

Questions for students to address:

1. What did you notice about...?
2. Why did that happen? (in this specific situation)
3. Have you noticed this before in other situations?
4. Why does it happen? (generalizing)
5. How can you use the information you learned?

Connecting Theory and Practice: Activities

Critical Incident Journal

Source: Eyler, Giles and Schmiede (1996)

Instructor Preparation Time: Low

Class Time: Low (usually homework)

Student Time: Medium to High

Particularly useful for:

- a) identifying assumptions in interpreting observations
- b) applying theories to lived experiences and noting discrepancies

Overview:

Students analyze a particular episode from their out-of-class experience according to criteria provided by the instructor.

Instructions:

Decide on the 'frame' you would like your students to use in analyzing a critical event in their fieldwork or project. With this frame in mind, develop a few questions or points for students to address in their analysis. For example, the sample handout below focuses on communication dynamics and would be appropriate for a field placement in an organization. If your students are conducting research, you might ask them to document a stage in which they discovered something unexpected and how they handled the findings.

Suggestions: Even before students go out into the field they can do a practice Critical Incident entry based on something in the readings or in a class discussion.

Sample handout for students

Choose an event that took place this week in your field work (either something you observed or participated in) which involved one of the following: a decision was made, a conflict occurred, a change occurred, or a problem was resolved. In your journal, address these points:

- 1. Describe the event and the roles of people involved (including yourself).*
- 2. Why was the issue important to the participants?*
- 3. Who was influential in the outcome and why?*
- 4. What did you notice about the communication process that took place?*

Suggestions:

Your comments will depend on your objectives for this assignment, but also consider ways to constructively point out to students how their assumptions may have shaped their responses. Also consider having students revisit their own entries and add additional comments on how their thinking might have changed.

Critical Incident Journal contd.**Possibilities for adaptation:**

Change the 'frame,' but use the same basic structure: 1. Describe the event. 2. What was important? 3. Who or what influenced the outcome? 4. What did you notice about _____?

Some examples of frames or areas of focus include

Creative Arts: *mode of expression, artistic conventions and allusions*

Social sciences: *power and capital, gender/race/social class*

Physical sciences: *problem solving methods/experimental models*

Humanities: *mode of expression, literary convention, historical context*

Connecting Theory and Practice: Activities

Double-Entry Journal

Source: Various

Instructor Preparation Time: Low

Class Time: Low (usually homework)

Student Time: Medium

Particularly useful for:

- a) drawing out both the intellectual and the emotional impact of an experience
- b) practice in differentiating objective and subjective details in recording observations.

Overview:

Students create two columns on their journal pages. In the first column they record analyses of the activity which focus on what they think or understand about what happened. The Five Questions Model provides a good structure for this first part. In the second column students record what they feel or felt about what happened. Did they enjoy the experience? What emotions surfaced--confusion? frustration? excitement? disappointment? sadness? compassion? Experience almost always evokes some type of response on the level of feelings and attitudes although this is not often acknowledged or discussed.

Suggestions:

It is worthwhile to repeat this assignment several times during the semester because over time one often sees significant development in the richness of observation and the ability to examine emotional responses. A word of caution about feedback is also appropriate here in terms of sensitivity to the emotions that students report. It is important to acknowledge the full range of subjective experience without appearing to judge how the students felt.

Connecting Theory and Practice: Activities

One Sentence Summary

Source: Angelo and Cross (1993)

Instructor Preparation Time: Low

Class Time: Low

Student Time: Low

This is particularly useful for:

a) encouraging synthesis of information. Students need to succinctly explain *Who/what does what, when, where, how, and why?*

Overview: After the students have immersed themselves in a particular topic through one or more experiential activities, the instructor asks them to write a single sentence which summarizes what they have learned about a phenomenon or principle.

For example, in a physics course students were conducting experiments on the properties of water and studying the process for converting water's fluid energy into mechanical energy or electricity. The instructor asked the students to write a one-sentence summary of the hydro-electric power generation process and provided a chart to help them organize their thoughts. The chart's first column contained the words

What?

Does what?

When?

Where?

How?

Why?

The instructor had filled in the word "water" beside "what."

Suggestions: It is helpful to go through this exercise yourself first and see how much time it takes and where any difficulties may lie. As a general rule, allow students twice as much time as it took you.

Tips for Assessment: If you choose to allow students to work together on writing the sentence it becomes more difficult to accurately assess the understanding of individuals. In a small class it may be more possible to walk among the groups and check for anyone having difficulty. Another option is to offer this activity more than once. The first time students might work together to help each other understand how to go about the task. After that they might work alone.

Possibilities for adaptation: This activity lends itself to use across the disciplines. With a slight change in the wording, the chart can be adapted to a wide variety of situations. Also, to avoid extremely complicated single sentences, you could give the option of writing 2 or 3 sentences in a paragraph which addresses each required point.

Connecting Theory and Practice: Activities

Preconception/Misconception Check

Source: Angelo and Cross (1993)

Instructor's Preparation Time: Low

Class Time: Low

Student Time: Medium

This is particularly useful for:

- a) gaining baseline data about what students already know or think they know.
- b) a “before-and after” check of how an experiential component influenced students’ understanding of a topic

Summary:

Before beginning a particular teaching unit, the instructor asks students to write brief responses to 2 or 3 questions which relate to topics they will be studying. Examining responses reveals prior knowledge and preconceptions. The instructor can then choose how best to use this information in subsequent lessons.

Suggestions:

An instructor teaching a course on literacy and language is preparing students to begin their service-learning projects at various centers which promote reading and literacy among young people. She wrote these questions on the board:

1. About what percent of junior high students read below grade level in the United States? What do you base your guess on?
2. What do you think are important reasons why a junior high student might not be reading at grade level?
3. What do you remember about your own experiences learning to read?

Students had five minutes to write their anonymous responses. The instructor collected all the papers and then redistributed so that students had someone else’s paper. They went through the responses but the instructor did not give any feedback about their accuracy. She wrote on the board the lowest and highest numbers given as answers for the first question so that the class could see the range. For questions 2 and 3, she listed each response until they began to repeat. Then she gave the class a follow-up assignment: 1) Research the statistics on how students in the United States perform in reading and make another informed guess for question one. 2) With a partner, find and read one article on issues which affect reading skills. Be prepared to summarize the article for the class.

Tips for Assessment:

This is a good activity for establishing baseline data on prior knowledge. Comparing these responses with student work later in the course provides evidence of what students may have learned as a result of coursework. If you want to test out whether students make certain discoveries/clear up misconceptions after participating in a certain activity, omit the assignment to research the accuracy of their responses and then give them the questions again immediately following the activity.

Connecting Theory and Practice: Activities

Snowball

Source: George and Cowan(1999)

Instructor Preparation Time: Low

Class Time: Medium

Student Time: Medium

Particularly useful for:

- a) ensuring inclusion of each person's perspective, especially those who tend to be reserved with their ideas.
- b) stimulating "cross-pollination" of ideas

Overview:

This is a three stage process for students to gather their thoughts and then engage in dialogue with classmates. At a point either in the middle of or immediately following an experience, the students stop to jot down individual notes in response to 1-2 key questions about the experience. After a few minutes, the students then pair up to exchange responses. Finally the pairs join into quartets. At the end of the time each quartet reports out to the full group. Through these levels of dialogue, students can help each other make connections they might not have otherwise and they also practice explaining their point of view.

Suggestions:

Careful thought about which questions to ask makes a difference in challenging students and encouraging a rich exchange. See examples of guiding questions for critical incident journals for some ideas.

Tips for Assessment:

The energy or "buzz" in the room is a good indicator of how much the activity engaged students. Patterns in the reports from the groups can provide more specific information about what students gained from the experiential activity. It is helpful to circulate among the groups to pick up on the kinds of issues coming up in their discussions and whether they had difficulty coming up with responses.

Possibilities for Adaptation:

This activity allows for a full range of applications based on the type of activity and questions posed. The instructor can modify the groupings so that students move directly from individual reflection into quartets or into larger groups depending on time available.

Connecting Theory and Practice: Activities

Two Minute Paper

Source: Angelo and Cross (1993); Mark Auslander of Anthropology uses a version of this in large courses as a way to efficiently gain a sense of students' understanding following an activity.

Instructor Preparation Time: Low **Class Time:** Low
Student Time: Low

This is particularly useful for:

- a) challenging students to evaluate information from an experience in order to decide what they consider the main lessons or significant facts and
- b) encouraging students to identify aspects of the experience which puzzle them and will need further exploration.

Overview: Immediately following an experiential activity or in the next class period, the instructor hands out 2 index cards per student. The instructor then poses two questions (also posting the questions on the board or other display) and gives students a short period of time to write their responses, one question per card.

Question possibilities:

- 1) What are the three most important things you learned from this experience?
 - What theories or principles from our class discussions do you think are relevant to what you just experienced?
 - How did your experience fit or not fit the discussion of X principle we discussed?
- 2) What was puzzling or unclear?
 - Which pieces of information you gathered were unexpected?
 - What questions do you now want to explore?

Suggestions: If you would like students to have a sense of how their responses compare to their classmates' ideas you could choose to have them share in pairs or small groups; another idea is for you to report back to the class on particular patterns that emerged across all the papers.

Tips for Assessment:

This is a very efficient way to quickly gauge what students gained from a particular experience. However, it is important to note that these are immediate responses and student views may change or deepen with further discussion. In fact, this activity is one way to determine if further discussion is needed to assist students in making particular connections or if they generally have a good grasp of the key points.

Possibilities for adaptation: This activity could be used for a wide range of experiential activities from laboratory research to an artistic exploration. The idea is to create a space for reflection on what happened and what sense students made of the experience while it is still fresh in their mind. One possible adaptation is

Two Minute Paper contd.

to repeat the exercise several times during the semester and ask the students to keep their cards once returned to them. The cards could then become markers of their learning process during the course and might be used as the basis for writing a brief self-assessment as part of a final paper or project.

V. Examples of Stages of Reflection and Assessment throughout a Course

Dance in Time

Course: *Dance in Time, a collaboration between programs in sculpture and dance*

Instructors: Susan Dibble and Tory Fair, Brandeis University

Overview and course objectives: This course focuses on the interplay among the body, time and space. The sculpture instructor aims for her students to learn about the body in motion and ways of conveying movement through the form and design of sculpture. The dance instructor aims for her students to explore the range of possibilities for expressing time through movement e.g. rhythm, and qualities of motion such as sustained versus abrupt. The collaboration among the students and instructors involves a cumulative process of dialogue—not only through words but also music, dance and other forms of expression, such as painting or sculpting—which results in a piece of performance art.

In one case, the students danced in front of television images projected onto a black board and also painted strokes of white onto the board as they moved. Their shadows, motion and brushstrokes all combined to create a complex effect.

Preparation Stage: Reflection on formal and personal conceptions of time

Objectives: In the preparation stage the key objective is to encourage students to draw out creative ideas from connecting their lived experiences with an abstract concept such as time. This involves tapping into deep parts of themselves and sharing what could be very personal insights. This means it is essential to develop an atmosphere of trust; students and instructors must build this through the sensitivity of their feedback to each other. The instructors make this explicit. They remind students to focus on positive comments to each other which reinforce strengths or offer suggestions constructively.

1. As homework, students research formal definitions and explanations of time and consider their personal relationship to time in their own life. Then they choose a piece of music, without lyrics, which in some ways speaks to the points they would like to convey about time.

2. In class students pair up to discuss their evolving thoughts about time and the reasons for selecting the particular music. Some examples from these discussions: the anxiety of never having enough time, new pressures to manage time in college, the sense of time passing quickly between major life transitions such as entering and leaving college.

The pairs might also merge to become groups of 4 continuing the discussion.

Midstream: Reflection and assessment during the process of choreography

Objectives: At this point students have begun individually choreographing movements to the music they chose. They need to reflect on the movement choices they have made and consider changes to better convey what they wish to express. This is also an opportunity for the instructors to assess progress and encourage students to help each other address challenges that come up. Again it is important through every stage to reinforce the tone of respect and trust.

1. Students work in pairs or groups to present a section of their first draft choreography and respond to feedback from their peers.

2. Instructors move around the room to observe interactions. The peer-to-peer assessment and feedback is important so the instructors make an effort to encourage effective groupwork. They may decide to rearrange the

Making the Connection: A Faculty Toolkit for Critical Thinking and Reflection Activities to Connect Theory and Practice in Experiential Learning. Brandeis University Office of Experiential Learning 2006.

groups in order to challenge particular students with very different approaches to learn from each other or to provide additional support to someone who is struggling. They also model helpful feedback, for example ‘I’d love to see you do more of ---’ or ‘What would happen if you tried---?’

3. Students are guided to join with a partner to figure out how they can merge their choreography into a joint piece. This is a particularly challenging and effective way for students to reflect on their work in relation to someone else’s ideas. The movement itself is a form of reflection.

This is a stage of ongoing assessment: judging what is working, what is not and then testing ideas. Both the students and the instructors are doing this. Instructors watch for signs of students fully engaging with their minds and bodies or signs that they may be withdrawing and not sure what to do next.

Debriefing: Critique of Performance Piece

Objectives: The course has been building towards this culminating event of performing a piece. The reflection at this stage is about synthesizing what they have learned and the assessment is as much a self-assessment as an evaluation by the instructors. It is important to reinforce a sense of accomplishment among the students even as they may refer to areas where they could push themselves farther.

There are multiple options for conducting the final debriefing. It is helpful to have videotapes of the performances. Students can submit an oral or written critique of their own work. They can hold a full class discussion about all the pieces: their strengths and areas for improvement. Groups can meet separately with the instructors to talk over what they learned from the process. The instructor may leave the discussion open or provide a set of criteria for students to use in their critiques.

Reflection and Assessment throughout a Course

You Be the Critic

Course: Music 116

Instructor: Judith Eissenberg

Instructor Preparation Time: High [the activity should build on previous assignments and class discussions which teach the vocabulary and structural elements students need for critiquing a piece].

Student Time: 2 homework assignments

This is particularly useful for:

- a) areas of study involving aesthetic or stylistic choices or where there is not a clearly defined ‘right’ approach to a task
- b) applying an understanding of basic principles and theories to explore how practitioners of an art achieve different effects through their stylistic choices.

Overview:

The activity involves 2 homework assignments which prepare students for the process of composing their own unique pieces of music. The first assignment is to compare and contrast three recordings of the same piece of music (provided by the instructor) with attention to how the different performers bring to life certain aspects of the dramatic structure of the piece. The second assignment is to write a critique of a live performance of this piece by the Lydian quartet. The critique should discuss choices of interpretation, informed by comparison to the interpretations experienced in the first part of the assignment. In order to create effective critiques, students must demonstrate their knowledge of the composition’s elements and discern the impact of stylistic choices. They are asked to compare diverse solutions to try to figure out what strategies seem most effective/convincing. To do this they must understand what the problems/questions are and then make a case for why they consider certain choices most effective. The final product from both parts is a 3-5 page paper.

Suggestions:

“Some students who are not necessarily passionate about the music get motivated by the challenge to figure out what/why/how they like one solution over another.”

Tips for assessment: Look for how well students demonstrate recall and understanding of relevant principles. If many of the critiques do not appropriately reference the theories then consider using class time to provide more models and guidance. Students might critique their own critiques after a discussion of the criteria for evaluating them.

Possibilities for adaptation beyond the Creative Arts

Consider other modes of presenting the information such as an oral presentation or group discussion.

Guided inquiry into historical or socio-political issues: students might compare and contrast the approach of two leaders who faced similar challenges or develop their own proposal for how they would have approached the situation and compare it with the actions of a leader. The discussion should explore the motivations behind the choices and the ways in which the actions illuminate themes from the relevant scholarship.

You Be the Critic cont'd.

Community or field-based project [Service-Learning/Field Study/Practice Teaching]: students might present their observations of how they themselves or a professional in the field placement addressed a problem, and explore a) how the choices reflect or deviate from the models studied in the course and b) the effect of the choices.

Judith Eissenberg says about this activity:

“There is a question in general about how to get students more involved in abstract theory...Some students come already motivated to try to find out what the building blocks are, and know that understanding theory will add to the performance. More of them would rather minimize that aspect. I found that this assignment [asking students to act as a music critic], which calls for musical criticism (with the parallel being literary criticism) gets them to look at the text, the written notes, in a more analytical way. They are asked to compare diverse solutions to try to figure out what strategies seem most effective/convincing. To do this they must understand what the problems/questions are. Some students who are not necessarily passionate about the music get motivated by the challenge to figure out what/why/how they like one solution over another.”

VI. Appendices