

HW #3: Exercise on the Integrative Process

Drawing from Bill Newell's conception of interdisciplinary (his early model of his theory of the integrative process) as discussed in Chapter Six of Augsburg's textbook, *Becoming Interdisciplinary, 2nd Ed.*, identify an interdisciplinary problem and follow the step by step way of identifying how the problem can be addressed or studied. Be sure to identify the complex phenomenon as an interdisciplinary problem, the appropriate disciplinary perspectives to be used, any salient concepts if appropriate, the complete list of disciplinary insights, areas of overlaps and areas of incongruity/conflict, your interdisciplinary response, and an evaluation/reflection on the process.

Augsburg's Adaptation of Newell's Conception of Interdisciplinary Study (1983):

9 Steps for the Integrative Process:

1. Become struck by a "confrontation" with a complex phenomenon.
2. Formulate an interdisciplinary question.
3. Identify salient concepts (Step from Hursh, Haas and Moore 1983)
4. Gather all relevant disciplines.
5. Consider the problem/question through the perspectives of each discipline, one at a time.
6. Gather together all the insights gained from each discipline.
7. Evaluate all the insights.
8. Fashion an interdisciplinary response to the question.
9. Confirm or disconfirm the proposed response/solution (Evaluate Process).

Example:

1. Description of Interdisciplinary Situation Happening in the News that Strikes You
2. Statement of Problem: Interdisciplinary Problem O (name the problem)
3. In order to understand/study/solve this problem, one needs to know more about the following concepts:

 Concept A
 Concept B
 Concept C
4. Disciplines that study Concept A: X, Y, and Z; Disciplines that study Concept B: Itsy, Bitsy, Teeny, and Weenie. Disciplines that Study Concept C: Y, Bitsy, and Teeny.
5. Discipline X view Concept A as Orange. Discipline Y views Concept B as Yellow, and Discipline Z views Concept A as Pink. Discipline X's view of Concept A is incommensurate with Discipline's Z's, etc.
6. Insights from Discipline A:
Insights from Discipline B:
Insights from Discipline C:
7. Ask yourself which insights conflict/overlap? Ask yourself how these insights can be integrated...or cannot be integrated.
8. Using an interdisciplinary approach, I can see that Interdisciplinary Problem O can/cannot be solved unless.....or something to that effect.
9. Review your process: do you need to go back to a step and expand upon it (example: Oops! I see now that I should have included another concept/another discipline. Or, I spent a lot of time researching one discipline's approach to the problem only to find out it was not very useful. Darn!

Worksheet for the Integrative Process

Step One:

Become struck by a “confrontation” with a complex phenomenon.

Make a list of possible complex (interdisciplinary) phenomenon you are interested in learning more about/doing research on/studying further:

Complex Phenomenon #1:

How/Why is it complex?

Why are you interested in this phenomenon/problem?

What future relevance does studying this problem have for me?

Complex Phenomenon #2:

How/Why is it complex?

Why are you interested in this phenomenon/problem?

What future relevance does studying this problem have for me?

Complex Phenomenon #3:

How/Why is it complex?

Why are you interested in this phenomenon/problem?

What future relevance does studying this problem have for me?

Decision Time! Now that you have identified three possible problems, choose one that is of most interest to you.

The complex problem I want to study further is # _____

Step Two: Formulate an interdisciplinary question.

In step one you may have described a situation. Now try to give the situation a name or turn it into a question.

Examples:

Sexual Harassment Prevention

How can sexual harassment be prevented?

❑ **Step Three: Identify salient concepts.**

What concepts are important to studying this interdisciplinary problem further?

List them here:

❑ **Step Four: Gather all relevant disciplines.**

You have two options:

Option One:

You can list the relevant disciplines needed to investigate further the salient concepts you identified in the optional step

Option two: You can list the relevant disciplines needed to study the problem further. Hint: One way to identify all relevant disciplines is to identify first the salient concepts.

❑ **Step Five: Consider the problem/question through the perspectives of each discipline, one at a time.**

Disciplinary Perspective #1:

Disciplinary Perspective #2:

Disciplinary Perspective #3:

[List as many that are necessary]

❑ **Step Six: Gather together all the insights gained from each discipline.**

Try to align disciplines together. Example:

Economics, business, and engineering have a similar perspective on the problem, while Sociology and Education have a similar, different perspective. (It is okay if one disciplinary perspective doesn't align with others. In this step you will see which are the "relevant" disciplinary perspectives and which aren't.)

❑ **Step Seven: Evaluate all the insights.**

Which insights overlap? Conflict? Are helpful? Not so helpful? Decide which ones are essential for solving the interdisciplinary problem. You might want to look for "common ground" between disciplines, starting on some point/fact on which they all agree and work from there, considering all their differences.

❑ **Step Eight: Fashion an interdisciplinary response to the question.**

Try to integrate the different responses into an interdisciplinary response.

Yes, coming up with an interdisciplinary response is murky, confusing and difficult. So are combating terrorism, rebuilding New Orleans, etc. You are getting a taste of how real-life problems are being addressed everyday in the workplace.

❑ **Step Nine: Confirm or disconfirm the proposed response/solution (Evaluate Process).**

You may have to repeat the entire process again. You may have to go back and fine-tune one or more the steps. The process is not intended to be one way, nor is it “clean” or “simple.” It is often messy, convoluted process. You may not like that, thinking that it is unorganized. Then again, think of all the messy, interdisciplinary problems out there...this is real life problem solving and decision-making!

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