



Prompting students to identify and integrate hidden learning: developing embodied questions

I. Key Concepts

Embodied Knowledge refers to the unconscious insights, experiences, assumptions, expectations, skills, etc. people gain through their life experiences but are generally not aware they possess. This essential but hidden knowledge exists outside of our conscious awareness. It not only drives our perceptions, intuitions, preferences, decisions, and actions, it is also where most deep learning occurs. The problem is most people don't know how to connect with or "read" this knowledge, which means they often don't realize when they are learning, what they are learning, or how they can use new insights and skills in other contexts.

Integrative Knowledge and Learning involves students identifying embodied insights and connecting those to the academic knowledge (disciplinary concepts, tools, frameworks, methods, etc.) they are learning in their courses. As a result, they develop the skills needed for integrative and lifelong learning: able to identify when and how they are learning; knowing how to "unpack" important moments to discover key insights; and able to facilitate awareness of learning in others.

Embodied questions prompt people to provide a detailed description of a learning moment or life experience that typically remains unconscious. A well-crafted series of embodied questions push peoples' hidden knowledge to the surface, where it can then be identified and understood.

II. Method: Using Embodied Questions for Integrative Learning

This process requires students be given time at the end of a class, project, exercise, assignment, etc. to identify and connect their insights and experiences. Although any opportunity to integrate learning is helpful, in order to develop the habits of mind needed to become effective lifelong learners, students need to encounter these kinds of questions on a consistent basis.

The most basic level of integrative learning involves 3 kinds of embodied questions:

1. **Retrieving** – First, students must be prompted to identify specific experiences that were enlivening, energizing or memorable (these can be emotionally positive, negative or neutral). Although these moments usually happen unconsciously, when identified and reflected upon, they reveal how, when, and where "real" learning happens. Examples include:
 - a. What was an insight or a-ha moment you had from today's _____ (class, assignment, project, exercise, simulation, etc.)?
 - b. What was a moment when you felt challenged or frustrated during _____?
 - c. What was a moment from today that stood out to you or caught your attention?
 - d. What were 3 concepts, tools, assignments, experiences, etc. from the class that have really stood out to you or grabbed your attention in some way?
2. **Unpacking** – Next, students must connect their initial enlivening or memorable moments to some other insight, action or decision in order to see *why* it occurred. Deep learning typically happens when something new or unexpected occurs that captures our attention,

or when something happens that disrupts our unconscious assumptions, expectations, values or norms in some way. Unpacking questions (based on a-c above) include:

- a. Why did this a-ha moment occur? (Did it make you aware of something new or disrupt some assumption or expectation?)
- b. What was the nature of the challenge or frustration you experienced and what specific steps did you take to resolve it?
- c. Why did these particular concepts, tools, etc. capture your attention?

3. Applying – After identifying memorable moments and why they occurred, students must be prompted to think about how they will use their insights from these moments in the future. Having to think, write or talk about a future scenario in a detailed way activates their imaginative capacities, which makes them much more likely to remember and value what they've learned in the future. Even when students struggle with this step (which is often the case), it greatly increases their capacity to transfer their knowledge and learning to new contexts and situations in the future. Examples of application questions include:

- a. Identify at least two ways you will apply the insights from your learning experience to other classes or your life outside of school.
- b. What are two ways you can apply what you've learned from this _____ to specific challenges you might encounter in the future? Be specific.

III. Example: mid/end of semester learning integration exercise*

Describe 3 "a-ha" moments from this class. For each moment, describe the following:

- a. What was the a-ha moment and the context in which it occurred?
- b. Why did it occur? How did the a-ha moment relate to your previous assumptions, experiences, beliefs, etc.?
- c. Describe at least two ways you will apply insights from this a-ha moment to your decisions and actions after this class.

Once you've written answers to a-c above, share your responses with two classmates.

IV. Levels of integration

Students' capacity to remember, integrate and apply their learning will depend a great deal on the level of integration described below, and how often they are supported in integrating:

1. Level 1: Students reflect on embodied questions individually, write down their thoughts, and then hand it in to the instructor who reads it.
2. Level 2: Students reflect on their own, write something down, share their insights in teams or small groups and then hand in their insights to their instructor.
3. Level 3: All of level 2 is combined into a whole group discussion before they are asked to revise their reflections and turn in their final written responses.

Each progressive level requires more time, but leads to much deeper learning.

**Instead of 3 a-ha moments, this exercise could focus on 3 challenging moments.*