Lecture on IDS

In IDS program, so helpful to know what IDS is. Inter-disciplinary study clearly draws on academic disciplines. What's the difference between "subjects" that you studied in school and "disciplines" that you study in college?

Subjects vs disciplines:

In elementary and middle school, you clearly studied subjects -- history, English, government, science, and so on. In high school, you probably studied subjects in some courses as well, though honors programs or AP courses probably exposed you to disciplines. [Ask them what the difference was.]

Formal definition of IDS:

interdisciplinary studies may be defined as a process of answering a question, solving a problem, or addressing a topic too broad or complex to be dealt with adequately by a single discipline or profession...IDS draws on disciplinary perspectives and integrates their insights through construction of a more comprehensive perspective.

Formal definitions are useful as references, to go back and check your understanding, but they do little to give you a feel for what is being defined. So close your eyes...

A Metaphor for Interdisciplinarity:

Picture a dense fog swirling around a huge jumble of objects, bizarre objects with strange shapes and varying degrees of translucence. Standing around the objects are scholars, each in their established location and each with a knot of students behind them, shining flashlights into the fog. The flashlights vary as much as the objects they illuminate. They all have similar wattage, but some emit a thin penetrating beam while others diffuse light over a wider area. (It is no coincidence that the flashlights are

different: over the years, they have been adapted to the objects they are used to study. Where the fog is particularly dense or the objects less translucent, flashlights must supply a more concentrated beam.) Each scholar has come to know a particular part of the jumble quite well, developing increasingly elaborate theories to account for all the features visible or inferred from that location. The scholars have also gotten quite proficient at using their flashlight to point out distinctive features of the landscape to students, who strain to see them through the fog. The students' eyes are not yet fully adapted, and they have not yet learned to visualize the objects as a whole from the facets visible to them. [Check to see if everyone is familiar with blind men and elephant]

When scholars from different vantage points come together to discuss the jumble, they find themselves disagreeing about its nature. But this is no dispute among blind men over an elephant. No one has seen the jumble unobscured by fog; there is no sighted person to identify the elephant. There may not even be an elephant; the jumble may not have overall coherence. Moreover, scholars may even focus on the same part of the jumble and still see something quite different because they look from different vantage points; this elephant is not symmetrical, so blind men on opposite sides may find that the trunk feels quite different. Still, blind men or scholars, examining elephant or jumble, what they find and what vision they construct from it is going to be shaped by where they stand, what they choose to focus on, and how they choose to study it.

Individually, the scholars represent different disciplinary approaches (each with its own methodological flashlight) to understanding the jumble. Collectively, observed from outside the disciplines, they represent what we call a multidisciplinary approach. That is,

different disciplinary perspectives are brought to bear on the jumble, but there is no systematic attempt to integrate them. If the conflicting disciplinary images are to be reconciled and combined into an integrated vision -- if the cacophony of the multidisciplinary approach is to be supplanted by integrative harmony -- then another approach is needed.

What the scholars need is a process for drawing together insights generated from their different disciplinary perspectives into a more comprehensive perspective. If the jumble were like an elephant -- a single, coherent, internally consistent though oddly shaped entity -- then the integration could be complete and the vision comprehensive, and thus encompass all the jumble. But the jumble is not that consistent or coherent. [E.g., human behavior follows different principles from the behavior of the natural world; and the search for underlying principles is not even an effective method for appreciating the creative products of the human mind.] Some of the principles by which the jumble operates vary with scale and location, as well as over time. Thus, only interdisciplinary integration is possible, integration designed to answer a specific question or solve a particular problem using what disciplinary insights are currently available.

Interdisciplinary integration is partial and temporary, limited in time and space.

Educational Outcomes Attributed to Interdisciplinary Studies:

[Ask them to apply the metaphor to our Self & Identity Course.]

- A. Traditional Liberal Arts Skills
 - analytical thinking
 - critical thinking
 - research
 - deeper understanding of the world around you (from repeatedly asking "why?")
 - clarity and precision in reading, writing, and thinking

- rethinking assumptions about yourself and your world
- B. Living-learning, experimental college skills
 - respect for (eventually even friendship with) people with different perspectives
 - cooperative learning, group research
 - flexibility, adaptability to new situations
- C. Interdisciplinarity
 - "see all sides of the story," see issues as multidimensional
 - evaluate testimony of experts, know they don't have the "final word"
 - breadth, familiarity with a wide range of subjects
 - tolerance of (even seeking out) ambiguity or paradox, receptivity to new ideas
 - sensitivity to ethical issues
 - ability to synthesize or integrate
 - sensitivity to diversity/multicultural issues
 - enlarged perspectives or horizons
 - creative, original, unconventional thinking
 - listening skills
 - sensitivity to bias (whether it be disciplinary, political, cultural, or religious)

Educational Outcomes Sought by Employers:

The competencies employers report on surveys that they are seeking in recent college graduates overlap considerably with the educational outcomes attributable to interdisciplinary studies, though employers tend to use different words to describe them. According to a recent issue of *Recruiting Trends*, the **skills and competencies are possessed by the best college graduates** (bold added) are:

- Possess energy, drive, enthusiasm, and **initiative**; hard-working; eager; professional and positive attitude, **strong self-motivation** and high self-esteem; confident; assertive yet diplomatic; determined; **flexible**, sincere and preserves integrity; disciplined; dependable; ambitious; **risk-takers**; uses common sense.
- Quick learner, asks questions, rapidly adapts textbook learning to the working world; analytical; willing to continue education and growth; bright, committed to excellence; adaptable; independent thinker; recognizes value of learning while on the job; not afraid to try new things; open-minded
- Excellent working knowledge of computers; presentation of software competencies, excellent computer literacy.
- Good writing skills, excellent oral communication skills, listens well, compassionate; empathetic; interpersonal abilities; excellent problem-solving and analytical skills; creativity and innovation talents; research expertise; determines goals and meets them.
- Team-spirited, understands group dynamics, and works well in group settings; team player; technically competent; mature, poised, social skills; goal oriented, understands sense of urgency; personable; always willing to help others, enjoys humor

- Academic excellence in their field of study; record of success; challenges organization's way of conducting business; willing to accomplish more than what is required; views the organization's total picture, not just one area of specialization.
- Diversity aware, understands political correctness; treats others with respect and dignity

The job of the students:

These wonderful educational outcomes do not happen automatically. You need to

- confront confusion and contradiction as you do the readings and talk about them.
- open your mind to alternative ways of thinking.
- accept ambiguity, dilemma, and paradox
- welcome challenges to your beliefs

You also need to learn about disciplines:

- basic concepts, theories, and methods;
- their assumptions;
- their world view or perspective.

Finally, you need to develop some proficiency at IDS:

- develop a feel for each discipline's perspective from what it writes about a topic
- use the perspective of one discipline to expose and challenge the assumptions of other disciplines
- synthesize or integrate disciplinary contributions to form a broader, more comprehensive (interdisciplinary) perspective