

Module 1B Introductory Narrative

Welcome back! We'll continue our exploration of intellectual fusion with some background information about the nature of academic disciplines, how they evolved, and a vision for education in the future; a vision that is really all about integrative learning and preparing students for the realities of the shifting workplace.

Following this introduction, you'll be reading a very old parable, *The Blind Men and the Elephant*, told as a poem by the 19th Century poet, John Godfrey Saxe. Analogical connections to this parable will figure prominently throughout a few of the upcoming readings, and offer up some profound wisdom with respect to the nature of monodisciplinary perspectives, and the value of integration and an interdisciplinarity mindset as a means of capturing the "reality" of a given situation.

The poem provides a good backdrop to the remaining articles in this section which can be broken down into three main topic areas:

- 1) History, nature and structure of academic disciplines
- 2) A "metadisciplinary" vision for the future of education
- 3) Contemporary workplace and future workplace trends driving the need for skill sets associated with integrative thinking and intellectual fusion.

The History, Nature and Structure of Academic Disciplines

In a previous reading, you hyperlinked over to a Wikipedia page that provided an outline of academic disciplines. If you didn't review that content carefully, click [HERE](#) to check it out carefully again. It's important that you have a good sense of the structure of knowledge, or more specifically, knowledge as it's generally broken down by our institutions of higher learning. Understanding the structure of academic disciplines in academia, the typical approaches to gaining subject matter expertise in higher education, and the advantages and disadvantages of this system will open your mind to a wealth of new ideas that you may have never before considered. Given this introductory context, your next step will be to dive

deeper into the nature and structure of academic disciplines with the next couple of readings.

First you'll read a book chapter about the history of the academy and the disciplines from an open access textbook, *Interdisciplinary Studies: A Connected Learning Approach*. This will provide you with a good sense of the evolution of academic disciplines.

Then you'll get a chance to dive a little deeper with a narrative I developed in order to introduce you to the idea of *disciplinary epistemologies*. Now, I know that's a big word, but you will immediately grasp the meaning, and the importance, when you give this article a read. Or, at the very least, you may be able to have a conversation like this:

Mom: So, sweetie, what did you learn in school today?

You: I learned about disciplinary epistemologies, and the nature and structure of human knowledge.

Mom: Oh, that's nice.

Mom: (Thinking to herself) What a brilliant young prodigy I have raised. All of that money we spend on tuition is so well-spent. Maybe my darling deserves a new car for her birthday.

(Well, we can dream, can't we?)

Funny, Dave, but why is this stuff so important? I'm glad you asked. The idea that sits at the core of this course is the idea of *integration*.

Integration is really what successful intellectual fusion and interdisciplinarity are all about. But in order to begin to grasp the nature and importance of integration (especially integration as it applies to interdisciplinary endeavors), we really need to have a background sense of what these "disciplines" actually are, what the associated challenges to integration might be, and why we might want to be integrating them in the first place.

Consider this, in order to make the perfect sandwich (a [*croque monsieur*](#), in my opinion), you're going to need to know a little something about bread, ham, and cheese. What type of bread, ham, and cheese do I need to create this oh-so-incredible sandwich? Why are these particular ingredients so important? What are the appropriate steps to construct the masterpiece of a sandwich? Only once you have a handle on the ingredients, have



acquired them in the proper form and amount, and have a sense of how to put them together properly, can you begin the actual process of integrating the ingredients in a way that results in the perfect sandwich. *So it is with interdisciplinarity – you need to know a little something about the constituent disciplines in order to perform the process of integration in a way that results in an amazing innovation or insight!*

Tu comprends? Magnifique! Bon Appetite!

A “Metadisciplinary” Vision for the Future of Education

Since the late 20th Century, educational psychologists (such as myself) and educational philosophers have been promoting the idea of a more integrated approach to learning. In fact, as far back as the early 20th Century, educational pioneers and reformers such as [John Dewey](#) were pushing for a more integrated, experiential curriculum for young learners. In this module, you’ll learn more about this evolving vision for the future of education, and begin to get a sense of how (at least the beginnings of) that vision is being manifested in this course.

Take a moment now to carefully peruse the following article about the history of integrative approaches to learning by reading this brief article: <https://www.edutopia.org/integrated-studies-history>

What did you think? I hope you were able to make some good connections to some of the changes you have been seeing as you have been progressing through your own educational journey. I hope were getting excited about the nature and value of an integrated perspective as you read that article. Integration is at the core of everything we will be doing here this semester, so if this idea doesn’t excite you, perhaps you could reconsider your reasoning for being in this course.

In addition to what you just read, the next in your readings for this module is called *Unity in Diversity: The Virtues of a Metadisciplinary Perspective*. Actually what you’ll be reading is a series of excerpts for a much longer

article, but I think it provides you with the highlights and complements the above reading effectively. It's written from an educator's point of view, and while you may not experience a true metadisciplinary curriculum during your time at the university, I hope that you will be about to use the tools you will be given in this course to help you intentionally and decisively establish integrative connections between the courses you are taking (and your life experiences) as a means of taking full control of your education (here in college, and well beyond).

It's worth noting that in the next module, you'll be taking a very deep dive into the notion of integration, and it's there that all of the pieces will come together (like the sandwich analogy), so that we can finally begin the work of a "chef" of intellectual fusion!

Skills, Knowledge, and Perspectives Associated with the Contemporary (and Future) Workplace

The third and final topic we will explore in this module has to do with the nature of the contemporary workplace, likely changes to the landscape of the workplace in coming years, and the skills, knowledge, and perspectives that will be most important as you embark upon your career in this period of unprecedented acceleration of change.

The rise in interest with respect to integrative learning, in my mind, reflects our dawning realization that we live in a world of unparalleled complexity. Students need to learn how to navigate that complexity and how to grapple successfully with the issues, opportunities, and problems that are generally unscripted and many times vigorously contested.

In addition to developing the right mix of integrative thinking and learning skills, there's also a set of cultivatable characteristics that are associated with the most effective integrative learners and participants in initiatives requiring interdisciplinary work. These characteristics include a [**growth mindset**](#), a deep sense of curiosity, comfort with ambiguity, a willingness to take risks, an open and adventurous mind, and cultural / intellectual [**humility**](#). Also required to navigate the terrain of intellectual fusion is the mastery of certain skills and tools such as analogical reasoning, abstract thinking, perspective-taking, effective collaboration skills, a knowledge of multiple disciplinary epistemologies / common languages, and the

development of a metadisciplinary perspective. We'll begin exploring some of these fascinating concepts here in the second section of Module 1, and continue to dig deeper into the anatomy of intellectual fusion as we progress through the upcoming modules!

There are several articles I want you to peruse about changes in the contemporary workplace. Taken as a whole, I think they will provide you with a clear sense of how the contemporary workplace is evolving, and how you can most effectively develop the skills and mindset need to thrive in the workplace of the future.

Finally, there's one key realization that I hope you make as you peruse this section's content about the nature of disciplines, contemporary workplace trends, and transferable skills and knowledge: *The skills associated with success in the future are exactly the same skills that are associated with integrative / interdisciplinary success.* Intellectual fusion can be seen as both an ideology for the future of knowledge growth and problem solving in the decades ahead, and also as a set of tools, skills, and knowledge needed to solve complex problems, make effective decisions, and work effectively with others in the evolving workplace of the future! As we move into Module Two and beyond, this idea will come into even clearer focus.

Finally, consider the potential impact of what you are learning here – in terms of your continued success at ASU, and in terms of what your newfound knowledge, skills, and perspective will have as you begin to consider your career aspirations after college.