
THE BENEFITS AND CHALLENGES OF INTERDISCIPLINARITY

Introduction

Interdisciplinary studies, as a concept, would not be possible without the foundational structure of *disciplinary* studies. In order to break apart and reorganize a system, a preliminary system must already exist. In the case of education, the modern disciplines—science, art, social science, humanities, and applied science—are considered the prologue to interdisciplinarity. Without these pre-established academic fields, interdisciplinary studies would not be possible. Understanding the history of education is essential to understanding the current academic climate surrounding interdisciplinarity.

A Controversial History

Until the industrial revolution, education was dominated by religion and classical texts, exploring questions of morality and a higher truth, but with the advent of technology at the end of the nineteenth century, education was expected to prepare workers for the rapidly industrializing economy. Specialized education was in high demand, changing the structure of many colleges and universities across the United States of America and the world. Around this time, disciplines were divided into sub-disciplines, like chemistry and anthropology, and many universities emphasized their disciplinary resources and research facilities. Knowledge transformed from an experience to a product.

Not everyone, however, supported the shift towards specialization at the turn of the twentieth century. [Charles Eliot](#), President of Harvard University during this educational transition, played a key role in the development of the “liberal arts education.” In many ways, Eliot’s radical views on education are still relevant today. For example, one of his most influential reforms was advocacy for a curriculum based on students’ interests rather than a pre-established curriculum. He believed that a student, by age eighteen, was old enough to select his own courses and pursue his own imagination. Interdisciplinarity abides by the same logic. Many educators disagreed with Eliot, arguing that schools exist to guide students through the established hierarchy of education. If students wander around at their own will, these educators argued, they may leave school with an incomplete or inconclusive education.

The Problem with Specialized Education

The rise of specialization has created a codependent relationship between student and society, reinforcing preexisting systems and making it more difficult to enact change. Many students pursue higher education to learn a specific skill or trade because they have the expectation that there is a need for their skill or trade in society at large. Over the past few decades, with the advent of the technological revolution, the negative consequences of a specialized education are becoming more apparent, demonstrating

that graduates need more than one kind of skill if they want to compete in today's job market. Graduates with degrees in art history may seem—at face value—less desirable than students who graduate with degrees in computational biology, but a science, technology, engineering, or math degree does not guarantee a job. If an applicant can't work in a team, write a grant, or engage meaningfully with other people, he may be turned away from a job or his career may not flourish.

The Benefits and Challenges of Interdisciplinary Studies in Education

Charles Eliot believed, at the turn of the twentieth century, that eighteen-year-old students had reached the age of autonomy and should be trusted to make their own educational choices. By eighteen, most students are excited about life and eager to experience what it has to offer, which is why they should be shown all the options. Why should anyone, educator or otherwise, tell an eighteen-year-old student what they should or should not learn? Education is exploration, a phenomenon that cannot be neatly packaged and universally distributed.

Many students entering college for the first time are surprised by the way it changes their thinking, identity, and perspective. The unique environment created by residential college life is an incredible experience for most young, college-aged students. It's such a transformative experience for so many people that it seems almost irrational to expect students to know what they want from it before they arrive. Interdisciplinary studies allows students to enter college and assume the role of captain in their personalized exploration of knowledge.

Oskar Gruenwald, editor of the *Journal of Interdisciplinary Studies*, believes interdisciplinary studies is a “novelty” that will reinvent higher education. By giving students the opportunity to bridge disciplines, new connections are forged and important contributions are made to the world of higher education and beyond. Students are able to combine multiple disciplines and pursue different ways of thinking about the same problem or subject. It's a revolutionary way of learning that encourages cross-disciplinary collaboration, enables students to develop critical thinking skills, and presents many “real world” opportunities for growth.

Despite the advantages, Michelle Appleby, senior lecturer of education studies at the University of Derby, has expressed some of the disadvantages that interdisciplinary students may face: “one of the biggest barriers to achieving true interdisciplinary study in education environments is the necessity for collaboration of educators.” One of the capstones of higher education is the collaboration between students, professors, and advisors. Departments are made of people working towards the same goal, taking similar classes, and exchanging similar ideas. Interdisciplinary students are removed from the “common core” experience of education, creating a personalized layout instead. One of the benefits of a common core trajectory is the sense of community it brings to education, a sense of community that some interdisciplinary students may not experience in the same way that traditional students experience it.

The Benefits and Challenges of Interdisciplinarity in the Workplace

According to an article published by Forbes Magazine, “businesses are looking for someone who is confident in themselves and what they want in a career, confident in the successful tasks they have completed, knowing your strengths, independent thinkers, ambitious problem solvers, goal-oriented proactive workers, works well on a team, enjoys learning new things, and finally, someone who is reliable and responsible. All of these things make up a phenomenal employee that any employer would like to hire” (Ryan, 2016). Graduating with a career-oriented degree, like “business,” might help a recent graduate find a job straight out of school, but will she succeed at her job over time? According to Howard Gardner, a developmental psychologist and expert on education, there are eight kinds of intelligence: linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, naturalistic, intrapersonal, and interpersonal. If students go to school and pursue a single degree without challenging their minds with different perspectives and disciplines, aren’t they depriving themselves of a brilliant opportunity to grow as an individual? One of the clear benefits of an interdisciplinary degree is for students to learn *how* they learn and the way their brains work. By challenging themselves with a variety of educational experiences, interdisciplinary students become better critical thinkers, gain more self-awareness, and grow more confident in the way their brains work and who they are as people.

Despite the clear benefits of interdisciplinary studies, many politicians and educators continue to cut resources to the humanities, arguing that an education should be skills-based and career oriented. By removing disciplines like philosophy, English, and art history from colleges and universities, lawmakers are depriving students of the opportunity to think in a variety of ways. Students who graduate with an anthropology degree may not pursue a career in anthropology, but their degrees have prepared them to critically analyze different cultures and traditions, to synthesize those observations, and record clear opinions about them. These are skills that can be used in a variety of ways and applications. For example, the ability to empathize and relate to another cultural identity is critical for any company trying to market a product. By cutting resources to thought- and emotional-based learning, politicians are stripping away a wonderful opportunity for students to develop their minds with the eight kinds of intelligence.

In a study conducted by William Newell and James Davis in 1988, researchers found that students who study interdisciplinarity are more likely to develop: affective cognitive skills; reading, writing, speaking, and thinking skills; higher curiosity for learning; more creativity and originality in thought processes; and an ability to integrate traditional ideas with current ideas. The benefits of finding creative and integrative ways to combine disciplines far outweigh the disadvantages of interdisciplinarity.

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Works Cited:

“A Platform for a Shared Discourse of Interdisciplinary Education | Klein | JSSE – Journal of Social Science Education.” *A Platform for a Shared Discourse of Interdisciplinary Education | Klein | JSSE – Journal of Social Science Education*. N.p., n.d. Web. 18 Oct. 2016.

Appleby, Michelle. “What Are the Benefits of Interdisciplinary Study?” *OpenLearn*. The Open University, 09 Apr. 2015. Web. <http://www.open.edu/openlearn/education/what-are-the-benefits-interdisciplinary-study>

Gruenwald, O. (2014). THE PROMISE OF INTERDISCIPLINARY STUDIES: RE- IMAGINING THE UNIVERSITY. *Journal Of Interdisciplinary Studies*, 26(1/2), 1-28.

Jones, Casey. “Interdisciplinary Approach – Advantages, Disadvantages, and the Future Benefits of Interdisciplinary Studies.” *ESSAI: Vol. 7, Article 26*. Web. <http://dc.cod.edu/essai/vol7/iss1/26>

Payne, S. L. Interdisciplinary studies and management faculty involvement. *Journal Of Education For Buisness*, 73(4), 211. 1998.

Ryan, Liz. “12 Qualities Employers Look for When They’re Hiring.” *Forbes*. Forbes Magazine, Mar. 2016. Web. 16 Oct. 2016. <http://www.forbes.com/sites/lizryan/2016/03/02/12-qualities-employers-look-for-when-theyre-hiring/2/#599c7d101ced>

Zakaria, Fareed. *In Defense of a Liberal Education*. W.W. Norton and Company, 2016. Print.