



Senate Summer Project
How do Interdisciplinary Programs Prepare Students for job Markets grounded in disciplinary models.

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For a second year in a row, *U.S. News and World Report* ranked Arizona State University as the number one institution of higher education in innovation. ASU President Michael M. Crow, recognizes the centrality of interdisciplinarity for this distinction. "Our students' paths to discovery don't have to stay within the boundaries of a single discipline. Our researchers team up with colleagues from disparate fields of expertise. We use technology to enhance the classroom and reach around the world. We partner with cities, nonprofits and corporations to support our advances as the higher-education economy evolves. This ranking recognizes the new model we have created," articulated President Crow. Given ASU's national and international reputation as an innovative institution, and that employer's rank ASU as the 10th university for employability of graduate students, documenting the benefits of interdisciplinary research and curriculum for ASU graduates is of outmost importance.

To answer the question: How do interdisciplinary programs prepare students for job markets grounded in disciplinary models, I applied a three prong methodology: 1) A review of existing academic literature; 2) Interviewed directors of key interdisciplinary programs; and 3) Gathered data on employment of ASU graduates of interdisciplinary programs. ASU's innovative organizational structure enhances interdisciplinarity. There are a variety of interdisciplinary programs at ASU, which run the span of the humanities, social sciences, and natural sciences. However, in order to make this project more manageable, I opted to focus on the liberal arts (humanities and social sciences). This narrowing made sense to me given that I am a faculty member who bridges the humanities and social sciences with an appointment in the Social and Cultural Analysis Program in the New College of Interdisciplinary Arts & Sciences.

Throughout the summer and fall, I met with the directors and staff of various interdisciplinary schools including the School of Humanities, Arts & Cultural Studies; the School of Transborder Studies; the School of Politics and Global Studies; the School of Social Transformation; and Interdisciplinary Humanities and Communication Studies. I am very thankful to the following individuals who met with me and provided valuable information: Dr. Louis Mendoza, director of the School of Humanities, Arts & Cultural Studies; Dr. Alejandro Lugo, director of the School of Transborder Studies; Dr. Elsie Moore, Director of the School of Social

Transformation; Dr. Cameron Thies, Director of the School of Politics and Global Studies and Ms. Gisela E. Grant, Internship Coordinator & Global Career Development Facilitator SPGS ; and Dr. Ian Moulton faculty head of Interdisciplinary Humanities & Communication Studies in the College of Integrative Sciences and Art.

In this report I will outline how different interdisciplinary programs prepare undergraduate and graduate students for the job market. In order to contextualize the results of this project, I will first offer a working definition of the terms discipline, multidisciplinary, interdisciplinarity, and transdisciplinarity.

I. Definition of terms:

Disciplinarity refers to a particular field of study, a specialization. In the contemporary academy the areas that are considered disciplines, in general are fields of study such as English, History, Philosophy, Anthropology, Spanish, and so forth as these are fields with established learned societies, theories, methodologies, and journals. However, today even these established fields of study are informed by interdisciplinarity and many interdisciplinary studies also have their own professional organizations, theories, methodologies, and journals. Another distinction worth noting is between multidisciplinary, interdisciplinarity, and transdisciplinarity. According to Julie Thompson Klein, an authority on interdisciplinary studies, “multidisciplinary approaches juxtaposes disciplinary perspectives, adding breath and available knowledge, information, and methods. They speak as separate voices in an encyclopedic alignment. The status quo is not interrogated, and disciplinary elements retain their original identity. In contrast, interdisciplinarity integrates separate disciplinary data, methods, tools, concepts, and theories in order to create a holistic view or common understanding of a complex issue, question or problem” (Klein, 2005, p. 55). ASU is organized in all of these models: disciplinary (e.g., English Department); multidisciplinary (School of Historical, Philosophical, and Religious Studies, Interdisciplinary Humanities & Communication); Hybrid multidisciplinary and interdisciplinary (School of Humanities, Arts & Cultural Studies, School of Social Behavioral Studies), and Interdisciplinary (School of Social Transformation, School of Transborder Studies).

Transdisciplinarity, according to Klein (2014), indicates new forms of knowledge production and synthesis in light of the increasing fragmentation of knowledge. It is characterized by transgression and problem solving, according to Klein. In the humanities and cultural studies, transdisciplinarity pushes the boundaries of different fields and creating new areas of study. “Transdisciplinarity has always been about imagining futures” (Klein, 2014, p. 73). Therefore, one could argue ASU offers transdisciplinary degrees, but for the purpose of this report I will use the term interdisciplinarity as this is better understood, and the term used in the question posed.

II. Review of the Literature:

There are few studies that address the question at hand; however, I found a few pieces that address interdisciplinary hiring and how institutions of higher education can enhance interdisciplinary hiring among the faculty ranks. This is not an exhaustive literature review, but a sample to help highlight the question at hand.

Barbara J. Lawrence (2011) in her study “Careers, social context and interdisciplinarity thinking” examined career success in one particular organization within three perspectives: disciplinary, multidisciplinary, and interdisciplinary. She assessed career success through performance evaluation, salary, mobility, and personal feelings of satisfaction. Lawrence found two patterns worth noting: 1) perceived and observed social context produce results whose similarities are more compelling than their differences; and 2) the best results for objective career outcomes entail the relationship between perceived and observed social context. Lawrence concludes that interdisciplinarity was successful and created positive career outcomes. While this is a study of one particular organization, results bode well for interdisciplinary curriculum and career training.

Julie Thompson Klein’s book *Creating interdisciplinary campus cultures: A model for strength and sustainability* (2009) documents different efforts to hire and promote interdisciplinary faculty. Klein’s book offers practical strategies in the hiring and promotion of interdisciplinary faculty. While she does not document whether faculty trained in interdisciplinary areas obtained appointments in disciplinary fields, her study can shed light on to how interdisciplinary initiatives can also open positions in disciplinary fields.

Some of the challenges for interdisciplinarity are that scholars themselves must negotiate and navigate university processes that are still structured in disciplinary areas. This creates challenges for hiring, promotion and tenure, and faculty development/mentoring.

Hiring: There are different models to increase interdisciplinary faculty but some of the most common are cluster hiring, joint appointments, and to create faculty lines in interdisciplinary programs. For example, Northeastern University included hiring interdisciplinary faculty in programs such as economics, law, business, biology, civil and environmental engineering. In 2007 the University of Michigan announced an initiative to create 100 jobs targeting junior faculty with interdisciplinary interests. The University of Wisconsin engaged in cluster hires in the mid 90s and created 49 clusters with 137 faculty lines. There are concerns over joint appointments because they add a burden to faculty who have to split their time with two programs. Some also feel they have divided loyalties and a fragmented sense of home and high networking costs.

Promotion & Tenure: One of the biggest impediments for the advancement of interdisciplinarity is in the promotion and tenure review process, because most guidelines are based on disciplinary structures. In some cases disciplinary journals have more prestige because they have been in existence longer and, as such, are

perceived as more legitimate. Klein recommends to clearly define the appropriate criteria of how interdisciplinary scholarship is evaluated in P & T guidelines and probationary review. If a university wants to promote excellence in interdisciplinary the process of evaluation must be clear and well articulated.

Faculty Development It is importance to take into account that it takes time to gain new knowledge, develop relationships with colleagues in other disciplines, learn new disciplinary language, cultures, knowledge, and evaluation methods. In order to mentor faculty Klein recommends creating a bank of interdisciplinary scholars who can serve as mentors.

Although, Klein documents some challenges in interdisciplinary hiring and promotion, her study does conclude that interdisciplinarity offers benefits to universities, faculty, and students. Moreover, Klein's research does not document how interdisciplinary faculty fare in disciplinary job markets, but by demonstrating the value of interdisciplinary in the contemporary academy we can conclude that it is possible for interdisciplinary faculty to obtain disciplinary appointments.

III. Liberal Arts Interdisciplinary Programs at Arizona State University

I studied both undergraduate and graduate programs in the three liberal arts colleges. However, it is important to note that it is much more difficult to assess what are disciplinary and interdisciplinary jobs/careers at the undergraduate level. In some cases students are starting their careers so it might be too early to assess whether they are engaging in interdisciplinary careers, other students continue their education enrolling in advanced degrees. At the graduate level, I opted to focus on the Ph.D. programs on Justice Studies and Gender Studies as case studies. Justice Studies offers more data as the doctorate has been in existence for a long time. It is worth to see where ASU interdisciplinary doctoral degrees graduates obtain tenure-track appointments in disciplinary areas.

IV. Examination of Interdisciplinary Programs

Following is a breakdown by college and degree. I provide a description of each program and employment data when available.

New College of Interdisciplinary Arts & Sciences

New College is organized into three schools: Humanities, Arts & Cultural Studies (SHArCS), Social Behavioral Studies (SSBS), and Mathematics and Natural Sciences (MNS). New College defines its interdisciplinary function as follows "New College is nationally unique. Working across old disciplinary boundaries, our faculty produce innovative research, not just report on it. We take our students with us on this fascinating journey, which provides extraordinary opportunities for growth and exciting ways to shape your future" (<https://newcollege.asu.edu/>). Moreover, Dean Marlene Trump proposes that we prepare students for "jobs that do not exist now."

Among the key interdisciplinary program offered by New College we find in SHArCS, the newly constituted Social and Cultural Analysis that brings together American Studies, Ethnic Studies, Women & Gender Studies, Sexuality Studies, and Peace Studies; Latin American Studies; Interdisciplinary Arts & Performance; and Interdisciplinary Arts & Sciences. SSBS offers the degrees in Behavioral Studies and the newly approved Social Justice and Human Rights.

School of Humanities, Arts & Cultural Studies

Social Cultural Analysis prepares students for careers in both disciplinary and interdisciplinary areas such as cultural studies, history, literature, oral history, sexuality, social justice, sociology, and transnationalism. The degree was recently approved, but graduates of American Studies, Women & Gender Studies, and Ethnicity, Race & First Nation Studies have found employment in public, private, and non-profit sector. Alumni include an Arizona State Senator, former Director of the YWCA, and college professors.

Latin American Studies fosters language and cultural knowledge beyond print literature and is unique in its inclusion of the arts and sciences. The program allows students to immerse themselves in content courses while honing their language skills; it provides a broad foundation for students to study Latin America, the United States and the Iberian Peninsula. (The program was recently approved and there is no data on employment yet).

Interdisciplinary Arts & Performance prepares students to engage in practical and theoretical studies of visual, sonic, performance and interactive arts to become versatile artists. Students are prepared for professional and entrepreneurial opportunities, and they can tap into evolving marketplaces and expanding fields of arts research and practice. Students who major in interdisciplinary arts and performance receive extensive preparation for careers as artists, performers and creative professionals, and develop critical backgrounds useful for becoming future teachers and scholars.

Interdisciplinary Arts & Sciences is a variation of the classic liberal arts degree, as students combine lower-division foundational courses with upper-division courses in a specific area of concentration unique to their interests and career goals. The concentration can include but is not limited to: business, communication, criminal justice, education, environmental issues and physical sciences, languages and cultures, and social sciences and policy issues. The program culminates with a capstone internship experience.

School of Social and Behavioral Studies:

Social Behavioral Sciences curriculum provides an understanding of assumptions underlying the social and behavioral sciences; enables students to develop research skills necessary for analysis of complex social issues; offers a flexible program

tailored to the career goals of the individual student; and offers individual and group experiences in working with faculty on concrete intellectual and policy issues. The core courses provide students a background suitable to helping them better understand psychological and social principles related to the behavior of individuals across multiple social contexts and institutions (e.g., community, culture, family and society).

Social Justice and Human Rights spans the social sciences and the humanities to prepare students to meet the challenges of twenty-first century issues of social justice and protection of human rights in local, national, international and global contexts. The degree introduces students to principles and practices of everyday humanitarianism, multimedia advocacy, and theories and practices of social justice and human rights. (The BA will start in the Fall 17 semester).

Graduate Programs

MA in Social Justice and Human Rights addresses urgent social issues related to human security, labor, migration, children, family, education and the environment. The course work in this theoretically and methodologically rigorous program examines social issues in contexts defined by multiple and intersecting forms of social identity and disadvantage, including gender, race, ethnicity, class, sexuality and nationality.

Graduates of the program have careers in public, private, and non-profit sector. Some examples include the ASU Foundation, Domestic Violence shelters, Marketing, the Washington Office on Latin America, Mercy Corps, Arizona Lost Boys Center, and National Arts Strategies. Many of these alumni have positions of Assistant Director and Director. Additionally, many students have continued their education in Law School and/or Doctoral Programs.

MA in Interdisciplinary Studies is an innovative program that allows students to combine the study of two or more disciplines. Founded on the conviction that solving problems in the 21st century often requires an interdisciplinary approach, this flexible program provides exposure to a variety of research methods, historical perspectives and modes of inquiry. The program offers access to faculty members who are active practitioners of interdisciplinary inquiry. Working with the faculty, students may define their own area of emphasis or adopt an existing area such as American studies; cultural studies; gender studies; digital media art; or philosophy, rhetoric and literature.

Graduates pursue doctoral work or careers in a variety of fields, including Latin American studies, advertising and marketing, arts therapy, documentary film production, gallery direction, entrepreneurship, higher education administration and museum curatorship.

Dr. Louis Mendoza, Director of the School of Humanities, Arts & Cultural Studies argued that the curriculum offered by New College aligns with key liberal arts values such as holistic education, creativity, develop critical thinking skills, and qualitative and quantitative methods. The key is to translate these values into job skills.

College of Liberal Arts & Sciences

The programs consulted include School of Transborder Studies, The School of Social Transformation, and Global Studies.

School of Transborder Studies offers BA, MA & Ph.D. The Ph.D. program is intended for students who seek rigorous study that concentrates on the transborder and transnational economic, political, social, ecological, and cultural dynamics of Mexican origin and Latina/o populations residing on the Southwest U.S. and the Northern Mexican border, as well as other regions of the United States.

Dr. Alejandro Lugo, strongly believes that an interdisciplinary doctoral program should prepare students to be competitive in disciplinary areas. What this means is that students need to build competence in a disciplinary area, such as Anthropology with interdisciplinary studies. Because this program is new, there is no evidence to show whether this strategy is successful. However, in light of trends in higher education, there is reason to be optimistic that candidates with interdisciplinary backgrounds can be competitive in a disciplinary job market.

Global Studies

I met Dr. Cameron Thies, Director of the School of Politics and Global Studies and Gisela E. Grant, Internship Coordinator & Global Career Development Facilitator, SPGS Alumni Relations. Global Studies is very conscious about career paths and begin this process during freshman orientation. During the summer they meet with incoming freshman and families to discuss career development. Students start to create portfolios; they must create a LinkedIn account and e-portfolios. The course SGA 204 teaches students how to write a resume and interviewing techniques. Students must complete internships throughout their undergraduate education from freshman to senior years.

Global Studies majors have found positions in public, private, health and non-profit sectors. Alumni working in the public sector include the U.S. Department of State, U.S. House of Representatives, Arizona Department of Environmental Quality, and the U.S. Army. The private sector includes law firms, General Dynamics, Consulting firms, and Solar Energy. The non-profit sector includes a variety of organizations such as Human Rights Campaign, International Rescue Committee, Planned Parenthood of the Southwest, and Chicanos for La Causa among others.

School of Social Transformation

The data from the SST provided important information about interdisciplinary doctoral programs particularly the Justice Studies and Gender Studies programs. The data from the doctoral program in Justice Studies is the most relevant for this project given the interest in documenting how students with interdisciplinary degrees fair in disciplinary markets. Data of faculty appointments can specifically answer this question. Moreover, because the Ph.D. in Justice Studies has been in existence longer than Gender Studies, it offers a long-term picture of employment. Of 36 graduates of the doctoral program since 2005 who have tenure-tenure track positions, eight have appointments in disciplinary programs such as Anthropology, Sociology, Social Work, or Political Science. Not surprising, the majority have appointments in Criminal Justice/Criminology/Justice Studies. I examined the website of these faculty members and noticed that most are producing interdisciplinary scholarship, including those in disciplinary departments. The one graduate from the Ph.D. in gender studies with a faculty appointment has an interdisciplinary appointment in Women and Gender Studies. It is important to note that some graduates of both Justice Studies and Gender Studies have opted for non-academic careers, which include working on sexual health, police, child protection services, and public sector including a Governor of the Pueblo of Laguna and a research analysis for Maricopa County.

SST offers an MS in Justice Studies and an MA in Women's Studies (it is too soon to yield any data) there is anecdotal knowledge about employment for graduates of the MS in Justice Studies, which includes Apple Computers, Maricopa County Adult Probation, Arizona Department of Corrections, AZ State Juvenile Corrections, Drug Enforcement Administration, Military Intelligence, Naval Intelligence, US Sentencing Commission, Police Departments, and Labor Unions.

College of Integrative Sciences & Art

Interdisciplinary Humanities & Communication is dedicated to interdisciplinary research and excellence and innovation in teaching, and teach face-to-face, online, and hybrid courses in all our areas of expertise — from English, history, communication, and technical communication, to religious studies, philosophy, and Spanish. However, Dr. Ian Moulton informed me that the programs are interdisciplinary in name and organization, but the degrees they offer are disciplinary.

Interdisciplinary degrees:

BA General Studies offers students a flexible, innovative path to degree completion. Graduates of the program will be informed and effective members of society who are well-prepared for a changing global marketplace with its diverse cultures. The theme of this degree is society and the individual. Students explore the tensions between individualism and collectivism, the public and private selves and the interplay of culture and identity.

BA Interdisciplinary Studies provides students with the intellectual tools to integrate their concentration areas engage in transdisciplinary problem-solving and prepare for careers and graduate programs that increasingly cross disciplinary boundaries. An interdisciplinary studies student could choose to integrate concentrations like music and business, applied psychology and social welfare, communication and justice studies, public administration and ethics, digital culture and computer gaming, or many other unique combinations.

BA Liberal Studies is organized to address student interests in a broad array of disciplines and subject matter. The program aims to give students the grounding to use knowledge as more successful thinkers, decision-makers and leaders. The liberal studies core classes are designed to promote critical and creative thinking as students learn how to draw upon diverse disciplinary perspectives and modes of inquiry, help advance communication skills, and support professional career development.

IV. Conclusions:

Interdisciplinary research and curriculum as ASU examines complex social, political, and cultural dynamics in national and transnational contexts. Such examination engages in problem solving from multiple perspectives. As such interdisciplinarity prepares students to work in a complex rapidly changing world, and in doing so, develop leadership skills that can be put in effect in a multicultural world. Interdisciplinary education is creative, develops cutting edge theories, methodologies, epistemologies, and pedagogies.

Interdisciplinary scholars, students, and curriculum cut across disciplinary boundaries. Therefore, students are prepared in both disciplinary and interdisciplinary areas rooted in liberal arts traditions. An interdisciplinary education engages in critical thinking and develops strong communication skills. As a flexible model, it provides both disciplinary and interdisciplinary intellectual tools. From curricular and epistemological perspectives, interdisciplinary students are well prepared in disciplinary and interdisciplinary areas.

Due to limitation of the data, it is not possible to conclude whether interdisciplinary training helps or hinders employment in a disciplinary market. Saying that, at the doctoral level, although the majority of the graduates of the Ph.D. in Justice Studies have appointments in their area of study something that should surprise none, the fact that eight students have disciplinary academic appointments is a good sign. The data does suggest that students at the undergraduate and graduate level are finding employment in areas close to their majors.

V. Recommendations:

- One of the most difficult aspects of this project was to find employment data. There is no central place to find employment data. The quality of the data I

received depended on whether or not a particular unit had the data. Therefore, I recommend developing a unified way of obtaining employment information across the university and campuses.

- Continue to be an innovator in interdisciplinary education from the BA to doctoral programs. ASU's number one ranking in innovation is due, in part, to its innovative interdisciplinary curriculum and research. I recommend highlighting alumni from interdisciplinary programs with successful careers in recruitment literature (e.g., program websites, brochures, etc.).
- Mentoring interdisciplinary graduate students to converse both in interdisciplinary and disciplinary "languages." Perhaps this could be done through the Preparing Future Faculty Program. That is, prepare students to market themselves in both disciplinary and interdisciplinary areas.

Works Cited

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