

Narrowing the Gap

Implications of Arts Business Training on Artist Labor Market Outcomes

Christos Makridis Arizona State University University of Nicosia Jonathan Kuuskoski *University of Michigan*

ABSTRACT: This paper investigates whether entrepreneurship training subsequently impacts artists' labor market outcomes. Collecting data from major universities, we find that only 9.7% have arts entrepreneurship certificates; just 11.4% have any required arts entrepreneurship classes. Analyzing data from the American Community Survey (ACS) and controlling for demographic factors, fine arts graduates are 1.3% less likely to be employed and earn 8.7% lower annual earnings. However, individuals with both arts and entrepreneurial business training earn more and offset the earnings disadvantage by roughly a half. These results underscore the importance of integrating art entrepreneurship education with the sustainability of the arts sector. KEYWORDS: arts entrepreneurship, arts business, employment, earnings, wages, entrepreneurship pedagogy. DOI: doi.org/10.34053/artivate.12.1.182

I. Introduction

There is growing empirical evidence that the arts and cultural sector contributes substantially to the United States economy. As of 2021 arts and culture contributed just over \$1 trillion or 4.4% of gross domestic product (U.S. Bureau of Economic Analysis, 2022). That impact is manifested by arts workers, who both create new artistic offerings and facilitate the production and distribution of such offerings. Beyond direct economic impacts (e.g., sales of tickets to live performances and events, production of artistic goods, web-based services, and arts education, etc.), additional, indirect socio-economic benefits of the arts are created through arts education during early childhood (Makridis et al., 2022) and via the ways arts promote social capital and reduce political polarization and bring people

with different ideological perspectives together (Makridis, 2020).

Despite the immense socio-economic value that artistic labor creates, arts graduates in the United States have poor job prospects (Cascone, 2018) and the sector exhibits high uncertainty for workers (Menger, 1999). If artists tend to be highly educated, then why do they hold poor labor market prospects? Although the returns to college attainment have declined over the past decade (Valletta, 2018), there is substantial heterogeneity across degrees (Hastings et al., 2013). Much of the decline is concentrated heavily among arts majors: in fact, by the time students reach retirement, only 32% of arts and music graduates have recovered their college costs (Cooper, 2021). Furthermore, Makridis (2023) shows that artists have been earning less than their non-artist peers over time. One potential reason stems from the growing importance of social and other general skills that are often acquired and cultivated through business training (Deming, 2017).

Scholars have investigated the ways in which access to business training, often through the integration of arts entrepreneurship, can manifest positive outcomes beyond just venture creation. Following the work of Essig (2015), Hart (2018), Nytch (2018), Rabideau (2018), and Roberts (2012), arts pedagogies that integrate business training can foster greater employability, the creation of new arts ventures, intrapreneurship (entrepreneurial activity within existing organizations), project-based collaborations, and social impact. A recent survey among alumni finds that the three largest skill gaps reported are those they use "for financial and business management skills, entrepreneurial skills, and networking and relationship building" (Skaggs et al., 2022, n.p.). In fact, alumni report those skills as essential for advancing and sustaining arts career prospects.

The primary contribution of this paper is to explore the role of business training in the arts and suggest a renewed focus on entrepreneurship curricula for artists. First, we begin with a historical exploration and theoretical framing of how business training is deployed within the arts and the value of these skills for artists. Next, we draw on the U.S. Census Bureau between 2009 to 2019 (Ruggles et al., 2022), restricting our sample to college graduates. Finally, based on that data set, we examine the degree to which participation in arts business training impacts employability and earnings amongst arts graduates.

II. Background and Theoretical Framework

A. Precarity and the Arts Job Market

Our paper contributes to an ongoing discussion in arts pedagogy about the value of business training and exactly how to go about it. Over the last two decades, business training has been bundled within the arts entrepreneurship programs that have proliferated exponentially across both universities and conservatories (Beckman, 2007; Essig & Guevara, 2016; Fayolle et al., 2016; White, 2013)—a response driven both by increasing economic precarity amongst artists and institutional awareness about those alumni outcomes

(Strategic National Arts Alumni Project, 2012). A decade ago, the Strategic National Arts Alumni Project (SNAAP) annual report—which, at that time, encompassed 36,000 arts alumni across 66 institutions—indicated that more than 80% of working artists had to maintain employment outside of the arts for job security (Strategic National Arts Alumni Project, 2012, p. 19).

Follow up studies on the SNAAP data set showed similar indications of precariousness. For example, Lindemann, et al. (2012, p. 22) observed that 50% of artists who stopped working professionally did so because they could find better paying work in other fields, and Frenette (2020, p. 3) observed a 65% skills gap reported by arts alumni around financial and business management skills. White's (2013) initial analysis in response to the SNAAP data postulated that integrating arts entrepreneurship education could serve as an intervention to remedy skills gaps and foster greater resiliency amongst future professional art makers. Other scholars have long indicated that entrepreneurship training may be potent in transforming both professional outcomes and elevating artistic leadership skills (Essig, 2015; Rabideau, 2017; Roberts, 2012; Toscher, 2019). Our paper builds upon that conversation by exploring the relative saliency of arts business training on employment and income.

Relatedly, our results align with economic literature on artists as entrepreneurs. For example, Piano and Al-Bawwab (2021) developed a supply-side theory for explaining when artists specialize in both artistic and entrepreneurial capabilities. They find that "high art" markets incent artists to perform both tasks, whereas "low art" markets lead to a decoupling. As per capita income in society has risen, the market for "low art" has also risen, along similar lines as Cowen and Tabarrok (2000). Furthermore, Piano (2021) applies the framework to Renaissance Italian painters, explaining why and when some of them performed both artistic and entrepreneurial duties. Finally, Oates and Baumol (1972) and Baumol and Baumol (1994) were among some of the first economists to study competitive forces in the art market.

The precarity facing arts graduates derives from both internal motivations and external constraints. Popović and Ratković (2013) argue that many artists are willing to risk oversupplying the job market because of their inherent passion for their work and desire for self-discovery and actualization. Employers are often aware of and take advantage of artists' intrinsic motivations, which has led to the rise of contract work positions and the displacement of opportunities for full-time employment (Throsby, 2010). Menger (1999) articulates the problem field-wise: "[j]ob rationing and an excess supply of artists seem to be structural traits associated with the emergence and the expansion of a free market organization of the arts" (Menger, 1999, p. 1).

Artists are thus being driven to choose self-determined career paths in lieu of employment because of the precariousness of the arts employment marketplace. Artists are 3.6 times more likely to be self-employed than other workers ("Artists and Other Cultural Workers," 2019, p. iii). However, research shows artists are more likely to pursue self-

employment because they feel forced to do so due to a "lack of choice" and general economic precarity (Feder & Woronkowicz, 2022, n.p.). These findings correlate to the observation that 60% of trained artists who elect to pursue non-arts professions did so due to higher or more consistent pay in those other fields (Strategic National Arts Alumni Project, n.d., p. 28). Additionally, factors such as the level of student debt and social class of an artist—namely, cultural capital in the form of specialized knowledge or industry contacts—can impact the degree to which an artist stays in the field (Frenette & Dowd, 2020). These inequities can further exacerbate precarity for those artists with fewer means in their pursuit of an artistic career.

As current job market conditions have a detrimental impact on arts employment probabilities, entrepreneurship training has been identified as a potential intervention to facilitate more agency around career choice and longevity. Arts entrepreneurship, which integrates business skills within artistic contexts, has been shown to increase the probability artists will seek entrepreneurial career paths (Guo & McGraw, 2022). Yet significant, related skills gaps are reported in those areas—entrepreneurial, financial, and business management skills—by arts alumni (Frenette & Tepper, 2016). The disruptions caused by the COVID-19 pandemic have fomented additional uncertainty around career planning, further motivating artists to bolster their entrepreneurial and management acumen (Skaggs et al., 2022).

While prior research has focused on the intersection of entrepreneurial training and artists' pursuit of entrepreneurial career paths, this paper investigates the degree to which access to business training might impact artists' employability and earnings.

B. Modalities of Arts Business Training

While business training has been available at universities and colleges for well over a century, integrated arts business training is a relatively new field. In 1969, the Wisconsin School of Business at the University of Wisconsin-Madison launched the first Master of Arts—Business in Arts Administration ("Bolz Center for Arts Administration," n.d.). The New York Foundation for the Arts, founded in 1971, was amongst the earliest independent agencies to offer business training for professional artists ("New York Foundation for the Arts," n.d.).

Additional programs emerged in subsequent decades under the banners of music business, arts entrepreneurship, and arts management. Notable examples include the Entrepreneurship Center for Music at the University of Colorado, Boulder (founded in 1999), and the Institute for Music Leadership, originally the Arts Leadership Program (founded in 1996), at the Eastman School Music, as well as Columbia College Chicago's Arts Entertainment and Media Management program, founded in 1992, and the PAVE Program in Arts Entrepreneurship at Arizona State University in 2006 (Beckman, 2007). Arts management and music business programs proliferated from the 1970s as well, including New

York University's Masters of Arts in Music Business, which grew out of their arts administration program, founded in 1971 ("History of NYU Arts Administration Programs," n.d.), and Berklee College of Music, which launched its Music Business Major in 1992 ("A Brief History," n.d.). Barnet and Dixon (2014) observed 113 undergraduate and 14 graduate music business programs across the U.S, and, as of 2023, the Association for Arts Administration Educators lists 63 undergraduate and 94 graduate arts management programs within their international network ("Programs Archive," n.d.).

Arts entrepreneurship programs subsequently proliferated in the first decade of the twenty-first century, many having developed out of career service programs, as conservatories and universities began to grapple with the employment challenges facing graduates in the wake of the emergence of the gig economy (Beckman, 2007; Beckman, 2011; White, 2013). The Great Recession served as a wake-up call for many schools, who were confronted by the gaps reported by alumni around entrepreneurial and business skills as manifesting barriers to sustainable careers (Strategic National Arts Alumni Project, 2012; Frenette, 2020). Access to entrepreneurship training within tertiary arts education grew exponentially between 2006 and 2016, at which point 372 programs of some type were being housed at universities across the country (Essig & Guevara, 2016).

Arts entrepreneurship in practice delivers business training in a variety of ways, from advancing individualized career development to new venture creation (Beckman, 2007; Beeching, 2005; Cutler, 2009; Essig & Guevara, 2016; Rabideau, 2018). Common definitions frame entrepreneurship in the arts, at least in part, as a mechanism by which artists use business skills to create new ventures—specifically, as an interventional business practice adapted towards cultural production (Essig, 2015; Preece, 2011; Rabideau, 2018; Roberts, 2012; White, 2015). Much of that work also investigates the ways entrepreneurship training can intersect with broader professional considerations. Gary Beckman provided a flexible framework for arts entrepreneurship as "both an aspect of professional development and a discrete educational trajectory," which may manifest either towards the goal of new venture creation or as a means to transition more generally into professional life (Beckman, 2007, p. 89).

Others define entrepreneurship in the arts as a praxis for artists to understand and navigate their socio-economic ecosystem. For example, several scholars explore entrepreneurism as a mechanism by which artists may become effective advocates around social and aesthetic issues, such as cultural representation, labor policy, and the inherent value of art making (Chang & Wyszomirski, 2015; Hausmann & Heinze, 2016; Taylor et al., 2015). Linda Essig has embraced arts entrepreneurship as a highly inclusive continuum of practice, "[a] discovery and creation process for connecting means with desirable ends through an appropriate mediating structure within the arts and culture sector" (Essig, 2015, p. 242). Entrepreneurship encapsulates business training holistically towards creating value, both in a personal sense and for the world at large.

Despite the field's proliferation, relatively few institutions offer formalized,

curricular business training as part of degree programs. A national survey by Essig and Guevara (2016, p. 13) observed just 99 arts entrepreneurship degrees, minors and certificates available amongst U.S.-based research institutions, regional universities, art and design schools, liberal arts colleges, community colleges and vocational/technical schools. Additionally, no singularly dominant arts entrepreneurship framework has emerged, which reflects the still highly experimental nature of the field. Educators and practitioners thus continue to choose working research definitions that best suit their modalities of practice. As a result, Universities and arts conservatories deliver entrepreneurship training in various guises, from supporting the launch of new ventures to preparing graduates to innovate as employees within existing organizations, as well as resources designed to catalyze applied learning through self-directed projects. The kinds of training offerings that support such activity have also diversified—from degrees and certifications to granting programs, à la carte course offerings to ad hoc coaching services, and from pitch competitions to venture incubators. The field of arts entrepreneurship therefore provides contextual business training to most professional situations artists might find themselves in (White, 2015).

Research activities span books, case studies, white papers, empirical research studies, practitioner serious games, and academic journals. The focus of this study specifically investigates the impact of curricular business training on employability and earnings outcomes for arts graduates. However, the field also lacks sufficient empirical research to foster consensus around a particular theoretical framework or definition of practice (Essig & Guevara, 2016). The focus of this study is to provide one such contribution by examining the relative efficacy of business training, specifically in a curricular context, on the economic viability of working artists.

III. Data and Measurement

A. The Rationale for Measuring Curricular Arts Business Training

There are four primary reasons for specifically observing arts business curriculum, as evidenced by the field's literature. First, the goal of curricular integration has been central to the development of arts business education. The earliest major study on arts entrepreneurship, by Beckman, claimed that "[c]lassroom instruction is the primary mechanism of formal arts entrepreneurship education" (Beckman, 2007, p. 90). Essig's early research suggested that suffusing entrepreneurship across the curriculum could allay concerns within institutions around resource allocation and create more buy-in from colleges and universities of various sizes (Essig, 2009). In contrast, the first music business and arts management programs were curricular in nature, which established a precedent for other programs that have since followed ("Bolz Center for Arts Administration," n.d.; Barnet & Dixon, 2014).

Curricular content naturally provides progressive, contextual learning that can amplify applied learning (internships, self-guided projects, venture creation, etc.) but even in isolation offers pathways to deeper learning compared with one-off, or even sequential, co-curricular offerings. Indeed, the dominant foci of the most widely used academic publications in the field over the last two decades have centered around pedagogical applicability—how to translate business concepts for artists, how to integrate arts business concepts into arts curricula, how to train arts faculty members as facilitators of arts business skills in the classroom, and how to create more conducive arts business learning contexts within academia (Beeching, 2005; Beckman, 2011; Beckman 2022; Boyle-Clapp et al, 2016; Feist, 2013; Hart, 2018; Nytch, 2018; Passman & Glass, 2023; Radbill, 2017; Rabideau, 2018).

Second, while facilitating curricular content may seem more laborious and slow-paced as compared to creating new co-curricular offerings, the development of courses and degree programs demonstrates a deeper institutional commitment to the integration of arts business training. Curricular integration is already a common pretext for scholar-ship on strategies for sustaining entrepreneurship training more broadly within academic contexts, which may account for this trend in the descendent fields of arts entrepreneurship and arts business training (Archino et al., 2020; Fayolle et al., 2016; Tuominiemi & Benzenberg, 2021).

Delivering curricular content often also requires collaboration across units and thus may formalize the ways in which arts students have access to business training. The integration of business skills through entrepreneurship training in particular is a construct that has been levied as a tool for amplifying the impact of tertiary arts education and thus also often plays into narratives around the ways in which universities may serve as anchors for both developing new business models and to spur economic development. The greater depth offered by curricular content, coupled with its tendency to be more sustained within institutions, underlies this argument (Ashley & Durham, 2021; Bryan & Harris, 2015; Hausmann, 2010).

Third, co-curricular content varies to such a degree from institution to institution that tracking pedagogical effectiveness continues to perplex the field. Previous studies have painted broad strokes of correlation between access to business training and career readiness, yet they also consistently point both to the challenges of cataloging and quantifying the impact of specific arts business training resources (Beckman, 2011; Hart, 2018; Rapisarda & Loots 2021; Roberts, 2010; White, 2013). Scholarly interest in training efficacy is responsive to the broad persistence of an entrepreneurial skills gap reported by arts alumni, despite the proliferation of entrepreneurial training programs in the arts (Frenette, 2020; Strategic Arts Alumni Project, 2012).

Three other kindred research projects have approached the question of training efficacy through broader lenses. One recent Delphi study surveyed experts and unpacked 43 entrepreneurial mentorship best practices for academic practitioners, finding that

"mentoring and classroom-based entrepreneurship education can be complementary" (Hanson, 2021, p. 18). Another recent study using SNAAP data explored whether arts alumni's perceived preparedness in critical thinking, leadership, business management, and artistic skills during their tertiary training had a significant association with those alumni's subsequent predilection to pursue either freelancing careers or new venture creation (Guo & McGraw, 2022). They found that preparedness in business management and artistic specialty "... are positively associated with the probability of taking any of the entrepreneurial career paths" (Guo & McGraw, 2022, p. 16). Finally, a recent SNAAP special report examining motivations amongst professionals to stay versus leave the arts concluded that "artists would greatly benefit from more entrepreneurial-focused curricula within higher education" (Frenette & Dowd, 2020, n.p.). While these general findings indicate that curricular content might have a significant impact on the outcomes of arts graduates, specific studies on the effectiveness of curricular offerings have yet to be published.

Finally, curricular business training is captured by the Census Bureau's American Community Survey (ACS), which allows us to associate whether business training amongst arts graduates translates to better employment and earnings outcomes. Delivering arts business content in the classroom is thus more than a potent formula for sustaining and amplifying the impact of arts business training. It is a key limiting parameter that facilitates the analysis of the efficacy of business training on arts graduates.

B. Methodology and Analysis of the American Community Survey (ACS)

In order assess prevalence of curricular business training amongst arts graduates, we gather individual-level data from the American Community Survey (ACS) by the Census Bureau between 2009 and 2019. We restrict our sample to college graduates and deflate earnings by the 2012 personal consumption expenditure (PCE) index. For each individual, we see their employment status, hourly wage, and a wide array of demographics.

Starting in 2009, the ACS allows us to see individuals' formal degrees. We focus on fine arts degree holders, a specific set of business degree holders, and everyone else. Our focus on fine arts includes: Drama and Theater Arts; Music; Visual and Performing Arts; Commercial Art and Graphic Design; Film, Video, and Photographic Arts; Art History and Criticism; Studio Arts; and Miscellaneous Fine Arts. We align our classification of business as much with entrepreneurship as possible, so we specifically code respondents as having a business degree if they take "business management and administration" or "marketing and marketing research." We have experimented with other business sub-degree programs, such as finance and accounting, and have found that our main results become null, suggesting that simply taking business classes is not a panacea to learning entrepreneurship—the specific type of class matters.

Table 1 below documents these summary statistics across different partitions of the labor market with at least a college degree, including for the pooled sample in the ACS. We

report our main demographic characteristics of interest, coupled with labor market outcomes. Fine arts degree holders are slightly younger, more female, and whiter than their non-fine-arts counterparts. They are also slightly less likely to be employed, have lower hourly wages and annual earnings, and work less per week. The income differences are especially striking: fine arts degree holders make an average of \$50,866 per year, whereas their counterparts make \$73,349 per year.

Turning towards those with an arts degree but with or without some business degree, we see large differences in the share of females. For example, those with art and business degrees are 26% male, whereas those without business but with arts degrees are 40% male. Interestingly, however, the raw differences in earnings between those with and without business degree experience (and with an arts degree) are minor: those with business degree experience only earn roughly \$1,000 more per year. As we will explain shortly, these raw differences confound many potential omitted variables. For example, highly competent artists might choose to add an alternative major, such as mathematics or writing, rather than business, which would create negative selection effects. In our eventual regressions, we will control for many demographic and occupational differences to mitigate concerns about spurious correlations and omitted variables bias.

While we are not aware of any way of linking respondents in the ACS with the actual school they attended, the ACS still provides the most comprehensive data available to study arts entrepreneurship over time and on a nationally representative sample. Because we can see the degree program that a respondent has participated in, coupled with a wide array of demographic and labor market information (including occupation and industry), we can study the returns from having some business exposure. Formally, to understand the employment and hourly wage differences between those with and without finearts bachelor's degrees, we estimate multivariate models of the form:

$$y_{it} = \gamma ART_{it} + \xi (ARTSOCC_{it} \times ART_{it}) + \phi (BIZDEG_{it} \times ART_{it}) + \beta X_{it} + \zeta_o + \lambda_t + \varepsilon_{it}$$

where y_{it} denotes individual i's employment status in year t, ART denotes an indicator for whether the individual has a fine arts degree, ARTSOCC denotes an indicator for whether the individual is in an arts occupation, BIZDEG denotes an indicator for whether the individual has a business administration double major, X denotes a vector of individual demographic traits, and ζ and λ denote fixed effects on occupation and year. Standard errors are heteroskedastic-robust. Our vector of demographic controls include age, gender, and race (White, Black, Asian) and marital status. These controls help us mitigate bias that might emerge from composition effects related to preferences for the arts over other degree programs or occupations and/or other constraints (e.g., family commitments).

We restrict the sample to college degree holders in the ACS, reducing the sample size considerably as roughly a third of workers hold a college degree. We are mainly interested in the marginal effect of a fine arts degree on hourly wages or employment,

as well as the interaction effects with working in an arts occupation and holding a business degree. We classify arts occupations by standard occupational classification (SOC) codes, namely "Art and Design Workers" and "Entertainers and Performers, Sports and Related Workers."

When an indicator for employment is our outcome variable, we simply layer on controls for potential heterogeneity in capabilities or preferences. However, when log annual earnings is our outcome variable, we can exploit variation within the same occupation (i.e., artists with and without business degrees), comparing people with similar levels of age, gender, race, and marital status within the same occupation over time, thereby reducing concerns of a spurious correlation.

The main concern associated with interpreting the coefficients from this regression as causal is the presence of selection effects. That is, people with higher ability or skill are more likely to select certain jobs and majors. For example, in a world where all the most capable learners and workers select into a computer science degree program, then our marginal effect of fine arts on wages will be downwards biased. Similarly, if less capable learners and workers select into business, that will further downwards bias our marginal effect on the interaction. We view the business degree as a proxy for some amount of entrepreneurship training since such courses, at least at a theoretical level, have become standard. But we also recognize that the coefficients might reflect a broader suite of human capital—not just entrepreneurship training.

In reality, the direction and size of the bias is not fully known, so we do our best to control for confounding demographic characteristics (e.g., age, race, gender, marital status) and two-digit occupation fixed effects in a sequential manner. That ensures that our comparisons are on observationally equivalent people in similar major occupations rather than comparisons between, say, a cashier and a manager. Another concern with this setup is that our data only allows us to see formal degree holders. We do not, for example, observe whether individuals have undertaken a certificate program or even non-degree coursework. We believe that our results are likely to hold since degrees proxy for exposure to certain curricula, which should be reflected in any arts business curricula, too.

Table 1: Summary Statistics from the Census Bureau

	Pooled		Fine Art	s	Non-Fi	ne Arts	Arts	and		nd Non-
							Busine	SS	busine	ess
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mea	SD
									n	
Age	44.5	13.4	42.2	13.6	44.6	13.4	38.6	12.4	42.3	13.6
Male	0.49	0.50	0.40	0.49	0.49	0.50	0.26	0.44	0.40	0.49
Married	0.65	0.48	0.54	0.50	0.66	0.47	0.48	0.50	0.54	0.50
White	0.81	0.39	0.85	0.36	0.81	0.39	0.84	0.37	0.85	0.36
Black	0.07	0.25	0.04	0.20	0.07	0.25	0.06	0.24	0.04	0.20
Asian	0.09	0.29	0.06	0.24	0.09	0.29	0.06	0.23	0.06	0.24
Employed	0.94	0.24	0.92	0.27	0.94	0.24	0.93	0.25	0.92	0.27
Hours worked/w eek	40.7	12.2	38.3	12.8	40.8	12.1	39.9	12.0	38.3	12.9
Hourly wage	39.6	203.5	30.8	188.4	40.0	204.1	29.6	97.8	30.8	189.2
Annual earnings	72377	77043	50866	56589	73349	77700	51698	5402 9	5085 7	56617
Observa-	5570791		240868		53299		2592		2382	
tions					23				76	

IV. Differences in Labor Market Outcomes for Fine Arts and Other College Graduates

Table 2 below documents these results across a range of specifications that sequentially control for greater degrees of heterogeneity. Starting with column 1, we see that fine arts majors are 1.4 percentage points less likely to be employed than their counterparts. That gradient remains identical even after controlling for demographic characteristics. While business majors are more likely to be employed, we do not see a statistically significant interaction effect between arts and business degree holders (column 3). That could reflect the low incidence of unemployment among people with a college degree in general.

Turning towards column 4 where we switch our outcome variable to the log annual earnings, we find that fine arts majors earn 26.7% lower earnings than their counterparts. As we add additional demographic controls, the economic magnitude declines slightly to a 18.5% wage gap but remains significant (column 5). We subsequently add two-digit occupational fixed effects, controlling for differences in the types of jobs that people with an arts major select into, lowering the magnitude to a 8.4% wage difference (column 6).

Next, we turn to column 7 where we allow for heterogeneous treatment effects among those fine arts degree holders who also have a business degree. Based on our

earlier theoretical motivation, we expect that those with some business education would be better off than their counterparts. Like before, fine arts majors have a 8.7% earnings disadvantage, but those who also have a business degree earn an additional 4.2% more per hour. The net effect of holding an arts and business degree is still negative (6.5% earnings disadvantage) relative to their counterparts, but it is roughly half as negative as fine arts degree holders who do not also have a business degree. In other words, those with both an arts and business degree tend to earn higher earnings even after controlling for many possibly confounding factors.

Is this just a feature of double majoring? To answer that question, we can estimate column 7 controlling for an indicator for whether an individual has double majored, comparing those with an arts and business degree with their counterparts who double majored in other degree programs. This produces qualitatively similar results: the interaction effect on a fine arts and business degree declines from 0.042 to 0.029 but remains statistically significant (p-value = 0.026), suggesting that selection effects into double majoring are relevant but cannot explain the entirety of the result.

Finally, we turn to column 8 where we allow for an interaction effect between working in an arts occupation and holding an arts degree. These fine arts workers make an additional 6.8% more in annual earnings, almost completely offsetting the wage disadvantage of a fine arts degree. Likely, the strong positive interaction effect reflects the benefits of working in a job that aligns with the human capital investments and interests during college.

Table 2: Evaluating the Differences Between Fine Arts and Other Majors Over Time. The table reports the coefficients associated with regressions of an indicator for whether an individual is employed (columns 1-2) and the log hourly wage deflated with the 2012 price of consumption (columns 3-5) on an indicator for whether the individual has a fine arts bachelor's degree, an indicator for whether the individual also has a business degree, their interactions, conditional on controls and fixed effects. Controls include age, gender, marital status, and race (White, Black, Asian).

Dep. var.	Is Employ	ed		Log Annua	al Earnings			
=								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Fine Arts BA	014	014	013***	267***	185***	084***	087***	091
	[.001]	[.001]	[.001]	[.002]	[.002]	[.002]	[.002]	[.002]
Business			.004 [.000]				[.001]	
Fine Arts			.002				***	
BA × Busi-			[.006]				.042	
ness							[.013]	
Fine Arts								.068***
BA × Arts								
Occupation								[.006]
R-squared	.00	.01	.01	.00	.13	.35	.35	-35

Sample Size	5570791	5570791	5570791	5219604	4671481	4671481	4671481	4671481
Individual	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Controls								
Occupation	No	No	No	No	No	Yes	Yes	Yes
Fixed Ef-								
fects								
Year Fixed	No	No	No	No	No	Yes	Yes	Yes
Effects								

Sources: American Community Survey (2009-2019).

These results also complement recent empirical evidence by Makridis (2023), who finds that the relative earnings among artists, relative to non-artists, has further declined since 2006: whereas artists would earn 15% less than their non-artist peers with similar age, education, race, and gender, now they earn 30% less. Furthermore, when restricting the set of individuals to those with at least a college degree, those with a fine arts degree incur an earnings and employment penalty even if they work in the arts. In addition, those with a master's degree also earn much less than their artist counterparts with a college degree. While Makridis (2023) does not interpret these as causal effects—especially as they may reflect negative selection into further study among those artists who have yet to "make it"—they nonetheless underscore the importance of exposure to business training among artists, particularly in providing additional skills, networks, and other opportunities to help navigate a challenging labor market and build resilience.

While we have endeavored to control for a wide variety of potentially confounding factors and show that the differences in earnings are driven by exposure to business training, our data paper nonetheless has several shortcomings. First, arts degree holders who also have a business degree are only 1% of the sample. That this proportion is small should not come as a surprise; the findings align with previous research showing relative scarcity of curricular programs (Barnet & Dixon, 2014; Essig and Guevara, 2016; "Programs Archive," n.d.).

Second, there is unfortunately no way to connect the respondents in the ACS with the specific college that they attended. Ideally, we could measure exposure to business training at the individual level directly rather than inferring from their degree program. However, that will generally cause us to recover an "intent to treat," which may cause attenuation bias if anything since we will infer business treatment when none may have happened. In that case, our estimates would be overly conservative.

Third, we do not have a measure of quality in arts business training. In practice, we know that there is substantial heterogeneity in teacher quality and even institutional access, which contributes to post-graduation career outcomes and placement. However, that should only produce attenuation bias rather than change our main results.

Finally, we do not have direct measurement of individuals' participation in arts business training. Rather, we only have a proxy based on the individuals' exposure to business curriculum. Still, the analysis above effectively positions curricular business training as a

proxy for arts-focused business exposure for two reasons. First, while the low frequency of arts majors also earning a business degree indicates that practice is not common, it is reasonable to assume arts students who do take business courses may do so to gain information relevant to their career interests. Arts business curricular content offered within arts colleges, or in partnership with arts colleges, could thus create advantages for those interested in such training—the psychological and course credit barriers may be smaller, and those courses generally will be more accessible as they are scheduled in unit around other required courses. The rise of arts entrepreneurship, music business, and arts management programs reflects those goals. However, additional research is required to determine the degree to which arts unit-based business courses are, indeed, more accessible than business school-based courses.

Future work should aim to harmonize individual-level data on employment and wages with higher education data degree attainment through the use of the Longitudinal Employer Household Dynamics (LEHD) fielded by the Census Bureau, for example. The LEHD tracks individuals over time across employers but would require augmentation with state-level data on educational attainment, which is only possible in a subset of states. Such data would also allow researchers to identify how different employers value different sets of skills and educational backgrounds, and whether these valuations have changed substantially over time as the arts sector has also changed.

We have taken an initial step towards such an analysis by compiling the 2022 US News and World Report list of top universities (2022-2023 Best Universities in the World, 2022). We reviewed the catalogs for the top 185 institutions (Table A in the Appendix), examining the curriculum at each of these institutions and looking for any arts entrepreneurship certificate and coursework related to arts business available for students. We find that just 9.7% (18) colleges offer a curricular arts entrepreneurship certificate program while 11.4% (21) require at least one arts business course—representative of arts entrepreneurship, music industry, or arts management topics. These rates of incidence supplement previous findings by Essig and Guevara (2016), Barnet and Dixon (2014), and White (2013), and reinforce the challenges artists face in integrating arts business training into their degree programs. There are several limitations to this work, however. First, data on rates of participation in specific courses, minors, certificates, or even degrees is not readily observable at the institutional level from the US News and World Report. Second, the variety of nomenclature used to represent arts business content varies from school to school, which means that the incidence of such training may be under- or over-represented. Some institutions may indeed deliver embedded arts business training through courses that are not listed explicitly as such. Third, the list includes schools outside of the United States, which is asynchronous to the United States-based ACS data. These issues are outside the scope of this paper, and we leave them to future research.

V. Conclusion

Each year, thousands of new arts graduates enter the labor market. But many of them have a tough time finding employment and, even among those who do, many still struggle to pay their bills and earn a living within the arts. Some colleges and conservatories have launched arts entrepreneurship, arts management, or music business programs to improve those outcomes, but the criteria for such programs and their relative efficacy remains in question and many programs have yet to do so. The purpose of this paper is to examine the value of arts business training quantitatively.

We synthesized the literature on the growth of arts business training and the field's motivations. Using data from the Census Bureau's American Community Survey between 2009 and 2019, we also estimated the association between having both an arts and business degree and both employment and earnings outcomes. We find that, while arts graduates earn 8.7% less than their non-arts graduate counterparts, those with a business degree only earn 3.5% less. In other words, having both arts and business exposure offsets roughly half of the earnings disadvantage that arts graduates incur. Similarly, we find that those arts graduates who also work in an arts occupation only earn 2.3% less per year rather than 9.1% less among those graduates in non-arts occupations. Our results control for demographic differences (e.g., age, race, gender, etc.) and compare workers in similar occupations.

These findings have higher education policy implications. First, curricular business offerings for arts students—those that translate and apply business content within arts environments—have a positive impact on the future earnings of arts graduates. Given the rarity of such programs, integrating business curricula within higher education training requirements should be a priority for institutions of all types, and there could be social value in conditioning or allocating federal resources to fund such programs. Coupled with findings on the potentially negative returns to a college education (Makridis, 2023), these results highlight the ways colleges can help promote greater diversity of human capital for their artist graduates. Otherwise, colleges risk continuing to produce more arts graduates that the labor market cannot accommodate, putting graduates in even greater financial precarity and debt.

Beyond advancing professional outcomes, institutionalizing such training based on tangible outcomes could also be leveraged as a recruiting and fundraising tool. Similarly, it appears that delivering business training specifically in an arts training context is relevant to catalyzing better earnings outcomes, suggesting that cross-unit collaborations—drawing from knowledge in the business school but translated and applied within an arts college or department—may be more effective than simply motivating artists to take business classes.

Additionally, this study proposes that further research is needed to fully understand how institutions might deliver the most effective approaches to leveraging entrepreneurial, management, and business content in the curriculum. First, how might exposure to

business training impact the ability of artists to launch and sustain businesses? Given that artists are 3.6 times more likely to be self-employed than other workers ("Artists and Other Cultural Workers," 2019, p. iii), the ability to generate income independently may be as important as, if not more important than, employability in terms of the longevity of artist careers. Further study is also required to understand the degree to which exposure to business training impacts the longevity of new artistic enterprises and whether curricular or co-curricular training modalities better serve those ends. In order to understand the latter question, additional research is also needed to further explore which factors motivate artists to pursue business classes, the degree to which courses advertised as delivering arts entrepreneurship, arts management, and music business do, in fact, encapsulate business training, and what other barriers exist that limit access to business training.

Finally, questions remain about the factors that might influence which specific courses might more directly impact future earnings amongst artists. For example, curricular content may be blended, combining business training with more generalized career services content such as how to find employment, how to prepare application materials, how to negotiate, and other ancillary training. It is yet unclear whether such a blended approach would enhance effectiveness in terms of employability and future earnings. Nonetheless, we show that curricular business education, when delivered effectively, can have tangibly positive impacts on the outcomes of arts graduates and positions that work as important to explore further as an essential component of artistic training today.

Appendix

Table A: Top Universities with and without Arts Business Curricula

Rank	University	Has Arts Entrepre- neurship Certifi- cate	Has Curricular Requirement (Coursework of some kind)
1	Harvard University	No	No
2	Massachusetts Insti- tute of Technology	No	No
3	Stanford University	No	No
4	University of Califor- niaBerkeley	No	No
5	University of Oxford	No	No
6	Columbia University	No	No
7	University of Washington	No	No
8	University of Cam- bridge	No	No
9	California Institute of Technology	No	No
10	Johns Hopkins University	No	Yes
11	University of Califor- niaSan Francisco	No	No
12	Yale University	No	No
13	University of Pennsylvania	No	No
14	University of Califor- niaLos Angeles	Yes	No
15	University of Chicago	No	No
16	Princeton University	No	No
17	University College Lon- don	No	No
18	University of Toronto	No	No
19	University of Michigan- -Ann Arbor	Yes	No

20	Imperial College Lon- don	No	No
21	University of Califor- niaSan Diego	Yes	Yes
22	Cornell University	No	No
23	Duke University	No	No
24	Northwestern University	No	No
25	University of Mel- bourne	No	No
26	Swiss Federal Institute of Technology Zurich	No	No
27	Tsinghua University	No	No
28	University of Sydney	No	Yes
29	National University of Singapore	No	Yes
30	New York University	No	Yes
31	Washington University in St. Louis	No	No
32	University of Edin- burgh	No	No
33	King's College London	No	No
34	Nanyang Technological University	No	No
35	British Columbia Insti- tute of Technology	No	No
36	University of Queens- land Australia	No	No
37	University of Copenhagen	No	No
38	University of Amsterdam	No	No
39	University of North CarolinaChapel Hill	No	No
40	Monash University	No	Yes
41	University of New South Wales	No	No
42	University of	No	No

Pittsburgh		
University of Texas Austin	Yes	No
King Abdulaziz University	No	No
Peking University	No	No
Sorbonne Universite	No	No
University of Munich	No	No
Catholic University of Leuven	No	No
Karolinska Institute	No	No
Utrecht University	No	No
McGill University	Yes	Yes
Ohio State University Columbus	No	Yes
University of WisconsinMadison	Yes	No
Heidelberg University	No	No
University of Minne- sotaTwin Cities	No	Yes
Australian National University	No	Yes
Icahn School of Medi- cine at Mount Sinai	No	No
Georgia Institute of Technology	No	No
University of Manchester	No	No
Universite Paris Saclay	No	No
University of Mary- landCollege Park	Yes	Yes
Erasmus University Rotterdam	No	No
University of Colorado- -Boulder	Yes	No
University of Zurich	No	No
	University of Texas-Austin King Abdulaziz University Peking University Sorbonne Universite University of Munich Catholic University of Leuven Karolinska Institute Utrecht University McGill University Ohio State University-Columbus University of WisconsinMadison Heidelberg University University of MinnesotaTwin Cities Australian National University Icahn School of Medicine at Mount Sinai Georgia Institute of Technology University of Manchester University Paris Saclay University of MarylandCollege Park Erasmus University Rotterdam University of Colorado-	University of Texas- Austin King Abdulaziz Univer- sity Peking University No Sorbonne Universite No University of Munich Catholic University of Leuven Karolinska Institute No Utrecht University No McGill University Ohio State University- Columbus University of Wiscon- sinMadison Heidelberg University No University of Minne- sotaTwin Cities Australian National University Icahn School of Medicine at Mount Sinai Georgia Institute of Technology University of Mary- ter University of Mary- ter University of Mary- landCollege Park Erasmus University No Ves

66	University of Adelaide	No	No
67	Université de Paris	No	No
68	University of Califor- niaDavis	No	No
69	University of Califor- niaSanta Barbara	No	No
70	École Polytechnique Federale of Lausanne	No	No
71	University of Southern California	No	Yes
72	University of Illinois Urbana-Champaign	Yes	Yes
73	Vanderbilt University	No	No
74	Emory University	No	No
75	Technical University of Munich	No	No
76	University of Hong Kong	No	Yes
77	University of Tokyo	No	No
78	Humboldt-Universität zu Berlin	No	No
79	University of Western Australia	No	No
80	Pennsylvania State UniversityUniversity Park	Yes	Yes
81	Wageningen University and Research Center	No	No
82	Chinese University Hong Kong	No	Yes
83	Leiden University	No	No
84	University of Glasgow	No	No
85	Vrije Universiteit Amsterdam	No	No
86	University of Califor- niaIrvine	No	No
87	University of Barcelona	No	No
88	University of	No	Yes

	Groningen		
89	Rockefeller University	No	No
90	University of Oslo	No	No
91	University of Birming- ham	No	No
92	Ghent University	No	No
93	University of Bristol	No	No
94	University of Helsinki	No	No
95	Freie Universität Berlin	No	No
96	Lund University	No	No
97	King Abdullah University of Science and Technology	No	No
98	University of South- ampton	No	No
99	University of Arizona	No	No
100	University of Florida	No	No
101	University of Geneva	No	No
102	Carnegie Mellon University	Yes	No
103	Aarhus University	No	No
104	University of Califor- niaSanta Cruz	No	No
105	Hong Kong University of Science and Technol- ogy	No	No
106	Shanghai Jiao Tong University	No	No
107	Radboud University Nijmegen	No	No
108	Michigan State University	Yes	Yes
109	University of Cape Town	No	No
110	Queen Mary, University of London	No	No
111	University of Science &	No	No

	Technology of China, CAS		
112	University of Virginia	No	No
113	Uppsala University	No	No
114	University of Bern	No	No
115	Universidade de São Paulo	No	No
116	Zhejiang University	No	No
117	University of Bologna	No	No
118	University of Auckland	No	No
119	Brown University	No	No
120	University of Bonn	No	No
121	University of Padua	No	No
122	Weizmann Institute of Science	No	No
123	Stockholm University	No	No
124	Hong Kong Polytechnic University	No	No
125	Sapienza University of Rome	No	No
126	University of Texas Southwestern Medical CenterDallas	No	No
127	Kyoto University	No	No
128	Purdue University West Lafayette	No	No
129	University of Technology Sydney	No	Yes
130	London School of Hygiene and Tropical Medicine	No	No
131	Rutgers, The State University of New Jersey-New Brunswick	Yes	Yes
132	Seoul National University	No	No
133	McMaster University	No	No

134	University of Gothen-	No	No
135	Baylor College of Medi-	No	No
136	Nanjing University	No	No
137	University of Alberta	Yes	No
138	University of Basel	No	No
139	University of Sheffield	No	No
140	Texas A&M University- -College Station	No	No
141	City University Hong Kong	No	No
142	Fudan University	No	No
143	Indiana University Bloomington	No	No
144	Autonomous University of Barcelona	No	No
145	Case Western Reserve University	No	No
146	University of Warwick	No	No
147	University of Alabama- -Birmingham	No	No
148	University of Massa- chusettsAmherst	Yes	No
149	University of Göttingen	No	No
150	University of Leeds	No	No
151	Oregon Health and Science University	No	No
152	University of Montreal	No	No
153	University of Notting- ham	No	No
154	University of Utah	No	No
155	University of Liverpool	No	No
156	Curtin University	No	No
157	University of Newcas- tle	No	No
158	University of Hamburg	No	No

159	Sun Yat-sen University	No	No
160	University of Chinese Academy of Sciences	No	No
161	Technical University of Denmark	No	No
162	University of Rochester	No	No
163	University of Exeter	No	No
164	University of Sussex	No	No
165	Arizona State UniversityTempe	Yes	No
166	Cardiff University	No	No
167	Rice University	No	No
168	University Catholique of Louvain	No	No
169	University of Calgary	No	No
170	University of Califor- niaRiverside	No	Yes
171	University of Milan	No	No
172	Tel Aviv University	No	No
173	University of Freiburg	No	No
174	Delft University of Technology	No	No
175	University of Iowa	Yes	No
176	Huazhong University of Science and Technol- ogy	No	No
177	Northeastern University	No	No
178	Queensland University of Technology	No	No
179	University of Colorado Anschutz Medical Cam- pus	Yes	No
180	Eberhard Karls University, Tübingen	No	No
181	Universite Grenoble Alpes (UGA)	No	No

182	University of Aix-Mar-	No	No
	seille		
183	University of Bergen	No	No
184	University of Lausanne	No	No
185	Technical University of	No	No
	Dresden		

References

- 2022-2023 best universities in the world US news and world report. (n.d.). Retrieved August 20, 2022, from https://www.us-news.com/education/best-global-universities/rankings
- A brief history | Berklee. (n.d.). Retrieved September 88, 2023, from https://www.berklee.edu/about/brief-history
- Archino, S., Lanier, M., & McClain, R. (2020). Reframing the arts within the liberal arts community: Teaching an arts entrepreneurial mindset to achieve transdisciplinary outcomes. *Artivate: A Journal of Entrepreneurship in the Arts*, 9(2). https://doi.org/10.34053/artivate.9.2.138
- Artists and Other Cultural Workers: A Statistical Portrait. (2019).

 National Endowment for the Arts. Retrieved September 11,
 2023, from https://www.arts.gov/impact/research/publications/artists-and-other-cultural-workers-statistical-portrait
- Ashley, A., & Durham, L. (2021). Universities as arts and cultural anchors: Moving beyond bricks and mortar to entrepreneurship, workforce, and community development Approaches. Artivate: A Journal of Entrepreneurship in the Arts, 10(2). https://doi.org/10.34053/artivate.10.2.150
- Baumol, W. J., & Baumol, H. (1994). On the economics of musical composition in Mozart's Vienna. *Journal of Cultural Economics*, 18(3), 171–198. https://doi.org/10.1007/BF01080225
- Barnet, R. D., & Dixon, D. (2014). Directory of music business degrees: Undergraduate and graduate: College Music Industry Degree Programs. CreateSpace Independent Publishing Platform.
- Beeching, A. M. (2005). Beyond talent: Creating a successful career in music. OxfordUniversity Press.
- Beckman, G. D. (2007). "Adventuring" arts entrepreneurship curricula in higher education: An examination of present efforts, obstacles, and best practices. *The Journal of Arts Management, Law, and Society, 37*(2), 87–112. https://doi.org/10.3200/JAML.37.2.87-112
- Beckman, G. D. (2011). *Disciplining the arts: teaching entrepreneur-ship in context*. Rowman & Littlefield.
- Beckman, G. D. (2022). The new arts entrepreneur: navigating the arts ecologies. RoutledgeTaylor & Francis Group.
- Bolz Center for Arts Administration. (n.d.). Wisconsin School of Business. Retrieved September 18, 2023, from https://business.wisc.edu/centers/bolz/
- Boyle-Clapp, D., Brown, M., & Gard, M. (2016). Fundamentals of arts management. Arts Extension Service, University of Massachusetts Amherst.
- Bryan, T. S. S., & Harris, D. (2015). The aesthetic value exchange: A potential framework for the arts entrepreneurship classroom. *Journal of Arts Entrepreneurship Education*, 1(1). https://doi.org/10.46776/jaee.v1.29
- Cascone, S. (2018, September 12). Fine arts majors have the worst job prospects in the US, says a new study. ArtNet News. Retrieved September 20, 2023, from https://news.artnet.com/art-world/art-majors-worst-job-prospects-us-1347035
- Chang, W. J., & Wyszomirski, M. (2015). What is Arts Entrepreneurship? Tracking the Development of its Definition in Scholarly Journals. *Artivate*, 4(2), 33–31. https://doi.org/10.1353/artv.2015.0010
- Cooper, P. (2022, May 12). Is college worth it? A comprehensive return on investment analysis. *Medium*. Retrieved September 3, 2023, from https://freopp.org/is-college-worth-it-a-

- comprehensive-return-on-investment-analysis-1b2ad17f84c8
- Cowen, T., & Tabarrok, A. (2000). An economic theory of avantgarde and popular art, or high and low culture. *Southern Economic Journal*, 67(2), 232–253.
 - https://doi.org/10.1002/j.2325-8012.2000.tb00335.x
- Cutler, D. (2009). The savvy musician: building a career, earning a living & making a difference. Helius Press.
- Deming, D. J. (2017). The growing importance of social skills in the labor market. *The Quarterly Journal of Economics*, 132(4), 1593–1640. https://doi.org/10.1093/qje/qjx022
- Essig, L. (2009). Suffusing entrepreneurship education throughout the theatre curriculum. *Theatre Topics*, *19*(2), 117–124. https://doi.org/10.1353/tt.0.0075
- Essig, L. (2015). Means and ends: A theory framework for understanding entrepreneurship in the US arts and culture sector. *The Journal of Arts Management, Law, and Society, 45*(4), 227–246. https://doi.org/10.1080/10632921.2015.1103673
- Essig, L., & Guevara, J. (2016). A landscape of arts entrepreneurship in US higher education. Ann Arbor, MI: Alliance for the arts in Research Universities. Alliance for the Arts in Research Universities. https://doi.org/10.13140/RG.2.2.35204.73606
- Essig, L., & Guevara, J. (2016). A Landscape of Arts Entrepreneurship in US Higher Education.
- Fayolle, A., Verzat, C., & Wapshott, R. (2016). In quest of legitimacy: The theoretical and methodological foundations of entrepreneurship education research. *International Small Business Journal: Researching Entrepreneurship*, 34(7), 895–904. https://doi.org/10.1177/0266242616649250
- Feder, T., & Woronkowicz, J. (2022). Reluctantly independent: Motivations for self-employed artistic work. *Journal of Cultural Economics*. https://doi.org/10.1007/s10824-022-09464-5
- Feist, J. (2013). Project Management for musicians: Recordings, concerts, Tours, studios, and more. Berklee Press.
- Frenette, A. (2020). Which skills do founders and freelancers need? Unpacking the entrepreneurial skills gap. *Databrief*, 8(1). Retrieved September 8, 2023, from https://snaaparts.org/findings/databriefs/which-skills-do-founders-and-freelancers-need-unpacking-the-entrepreneurial-skills-gap
- Frenette A., & Tepper S. (2016). What difference does it make? Assessing the effects of arts-based training on career pathways. In Comunian R., Gilmore A. (Eds.), *Higher education and the creative economy: Beyond the campus* (pp. 83-101). New York: Routledge.
- Guo, W., & McGraw, D. J. (2023). The arts alumni have spoken: The impact of training in higher education on entrepreneurial careers. Entrepreneurship Education and Pedagogy, 6(3), 410– 435. https://doi.org/10.1177/25151274221120071
- Hanson, J. (2021). Best practices for mentoring in arts entrepreneurship education: Findings from a delphi study. Entrepreneurship Education and Pedagogy, 4(2), 119–142. https://doi.org/10.1177/2515127420964120
- Hart, J. D. (2018). Classroom exercises for entrepreneurship: A crossdisciplinary approach. Edward Elgar Publishing.
- Hastings, J., Neilson, C., & Zimmerman, S. (2013). Are some degrees worth more than others? Evidence from college admission cutoffs in Chile (w19241; p. w19241). National Bureau of Economic Research. https://doi.org/10.3386/w19241
- Hausmann, A. (2010). German artists between bohemian ideals and entrepreneurial dynamics: Reflections on cultural entrepreneurship and the need for start-up management.
- International Journal of Arts Management, 12 (2), 17-29.

- Hausmann, A., & Heinze, A. (2016). Entrepreneurship in the cultural and creative industries: Insights from an emergent field. Artivate, 5(2), 7–22. https://doi.org/10.1353/artv.2016.0005
- History of NYU arts administration programs. (n.d.). Retrieved September 11, 2023, from https://wp.nyu.edu/artsadmin50/history-of-nyu-arts-administration-programs/
- Lindemann, D. J., Tepper S. J., Gaskil S., Jones, S. D., Kuh, G. D., Lambert, A. D., Lena, J., Miller, A. L., Kendall P., Rudolph, E. B., & Vanderwerp, L. (2012). Painting with Broader Strokes: Reassessing the Value of an Arts Education (Special Report No.1). Strategic National Arts Alumni Project. Retrieved September 12, 2023, from https://snaaparts.org/uploads/downloads/Reports/SNAAP-151617-Recent-Grads-Aggregate-Report.pdf
- Makridis, C. (2020, September 15). The expansion of art and cultural programs will diffuse political polarization. Forbes. Retrieved September 2, 2023, from https://www.forbes.com/sites/christosma-kridis/2020/09/15/the-expansion-of-art-and-cultural-programs-will-diffuse-political-polarization/
- Makridis, C. A., Guan, K., Ludington, E. R., Hopkins, M., & Parassidis, S. (2022). The role of arts and music in early childhood education. In A. L. Betts & K.-P. Thai (Eds.), Advances in Early Childhood and K-12 Education (pp. 290–316). IGI Global. https://doi.org/10.4018/978-1-7998-8649-5.ch013
- Makridis, C. A. (2023). The Labor Market Returns of Being An Artist: Evidence from the United States, 2006-2021. Journal of Cultural Economics, October. https://doi.org/10.1007/s10824-023-09490-x.
- Menger, P.-M. (1999). Artistic labor markets and careers. *Annual Review of Sociology*, *25*(1), 541–574. https://doi.org/10.1146/annurev.soc.25.1.541
- New York Foundation for the Arts | Mission & History. (n.d.). Retrieved September 11, 2023, from https://www.nyfa.org/wp-content/uploads/2019/11/NYFA-Mission-and-History-brief.pdf
- Nytch, J. (2018). The entrepreneurial muse: Inspiring your career in classical music. OxfordUniversity Press.
- Oates, M. I., & Baumol, W. J. (1972). On the economics of the theater in renaissance london. *The Swedish Journal of Economics*, 74(1), 136. https://doi.org/10.2307/3439014
- Passman, D. S., & Glass, R. (2023). *All you need to know about the music business* (11th Edition). Simon & Schuster.
- Piano, E. E. (2022). Specialization and the firm in renaissance italian art. *Journal of Cultural Economics*, 46(4), 659–697. https://doi.org/10.1007/s10824-021-09434-3
- Piano, E. E., & Al-Bawwab, R. (2023). The artist as entrepreneur. *The Review of Austrian Economics*, 36(1), 23–41. https://doi.org/10.1007/s11138-021-00547-8
- Popović, M., & Ratković, K. (2013). Oversupply of Labor and Other Peculiarities of Arts Labor Market, ZBW. *Deutsche Zentralbibliothek für Wirtschaftswissenschaften*. Leibniz-Informationszentrum Wirtschaft, Kiel und Hamburg.
- Preece, S. B. (2011). Performing arts entrepreneurship: Toward a research agenda. *The Journal of Arts Management, Law, and Society*, 41(2), 103–120.
 - https://doi.org/10.1080/10632921.2011.573445
- Programs Archive—Association of Arts Administration Educators AAAE. (n.d.). Retrieved September 2, 2023, from <a href="https://artsadministration.org/programs/?program-filter-degrees=&program-filter

state=°=undergrad&opt=all&cnt=all

- Rabideau, M. (2018). Creating the revolutionary artist entrepreneurship for the 21st-century musician. Rowman & Littlefield.
- Radbill, C. F. (2017). *Introduction to the music industry: An entre*preneurial approach. Routledge Taylor & Francis Group.
- Rapisarda, N., & Loots, E. (2021). A closer look into the scope of arts entrepreneurship education. *Journal of Arts Entrepreneurship Education*, 3(2), 65–74. https://doi.org/10.46776/jaee.v3.85
- Roberts, J. S. (2012). Infusing entrepreneurship within non-business disciplines: Preparing artists and others for self-employment and entrepreneurship. *Artivate*, 1(2), 53–63. https://doi.org/10.1353/artv.2012.0005
- Ruggles, S., Flood, S., Goeken, R., Schouweiler, M., & Sobek, M. (2022). *IPUMS USA: Version 12.0* (12.0) [dataset]. Minneapolis, MN: IPUMS. https://doi.org/10.18128/D010.V12.0
- Skaggs, R., Hoppe, E., & Burke, M. (2022). How COVID-19 Has Impacted the Needed Skills of Arts Graduates. *Databrief, 9(2)*. Retrieved June 2, 2023, from https://snaaparts.org/findings/databriefs/how-covid-19-has-impacted-the-needed-skills-of-arts-graduates
- Strategic National Arts Alumni Project. (n.d.). 2015, 2016, & 2017 Aggregate Frequency Report: Recent Graduates. Retrieved June 2, 2023.
 - from https://snaaparts.org/uploads/downloads/Reports/SNA AP-151617-Recent-Grads-Aggregate-Report.pdf
- Strategic National Arts Alumni Project. (2012). A diverse palette: What arts graduates say about their education and careers—annual report 2012. *Annual Report*. Bloomington, IN: Indiana University Center for Postsecondary Research.
- Taylor, E. A., Bonin-Rodriguez, P., & Essig, L. (2015). Perspectives on arts entrepreneurship, Part 1. *Artivate*, *4*(1), 3–7. https://doi.org/10.1353/artv.2015.0001
- Toscher, B. (2019). Entrepreneurial learning in arts entrepreneurship education: A conceptual framework. *Artivate*, *8*(1), 3–22. https://doi.org/10.1353/artv.2019.0003
- Throsby, D. (2010). Economic analysis of artists' behaviour: some current issues. *Revue d'économie politique*, 120: 47-56.
- Tuominiemi, K., & Benzenberg, S. (2021). Entrepreneurial pathways in art: An introductory course for undergraduate students in arts entrepreneurship. *Artivate*, *10*(1). https://doi.org/10.34053/artivate.10.1.106
- U.S. Bureau of Economic Analysis (BEA) | Arts and Culture. (2022). Retrieved September 3, 2023, from
- https://www.bea.gov/data/special-topics/arts-and-culture Valletta, R. (2016). Recent Flattening in the Higher Education Wage Premium: Polarization, Skill Downgrading, or Both? Working Paper 22935. Cambridge, MA: National Bureau of Economic Research.
- White, J. C. (2013). Barriers to recognizing arts entrepreneurship education as essential to professional arts training. *Artivate*, 2(1), 28–39. https://doi.org/10.1353/artv.2013.0002
- White, J. C. (2015). Toward a theory of arts entrepreneurship. Journal of Arts Entrepreneurship Education, 1(1). https://doi.org/10.46776/jaee.v1.33
- Cover image: Photo by Marvin Meyer on Unsplash, <u>www.unsplash.com/photos/people-sitting-down-near-table-</u> with-assorted-laptop-computers-SYT03xs06fU