

Alumni Outcomes & Career Pathways Project

Background

In 2022, Boise State contracted with Lightcast (formerly EMSI) of Moscow, ID for their Alumni Insight service. Lightcast employs a detailed matching process that connects employment data to the list of graduates provided. The resulting employment information includes data from three categories: government sources, online job posting activity, and professional profiles and resumes. While the results from Lightcast's matching provide a glimpse into the careers of alumni, these results are limited to alumni who had publicly available information on their employment/career. Importantly, these results do not provide calculated rates of employment/unemployment or data on all alumni (such as number of alumni employed by a particular organization or company).

Methods

All living alumni who earned a bachelor's degree or above from Boise State up through spring 2022 were included in the analysis. The overall match rate, or percentage of alumni for whom Lightcast found a match, was 43.6%. As might be expected, match rates were higher for more recent graduates and decline markedly for alumni who are further from graduation. See Table 1.

Table 1. Match Rates by Degree and Graduation Year

Graduation Yr Bands	Bachelor		Graduate	
	#	% Match	#	% Match
2020-22	11,186	37.1%	3,482	48.7%
2010-19	27,774	53.3%	7,751	57.7%
2000-09	15,213	45.2%	3,755	48.3%
1990-99	10,897	38.7%	1,840	33.6%
1980-89	7,392	31.7%	1,011	25.8%
1970-79	5,010	18.6%	317	20.2%
1966-69	204	13.7%		
Overall Match Rate	42.9%		49.1%	

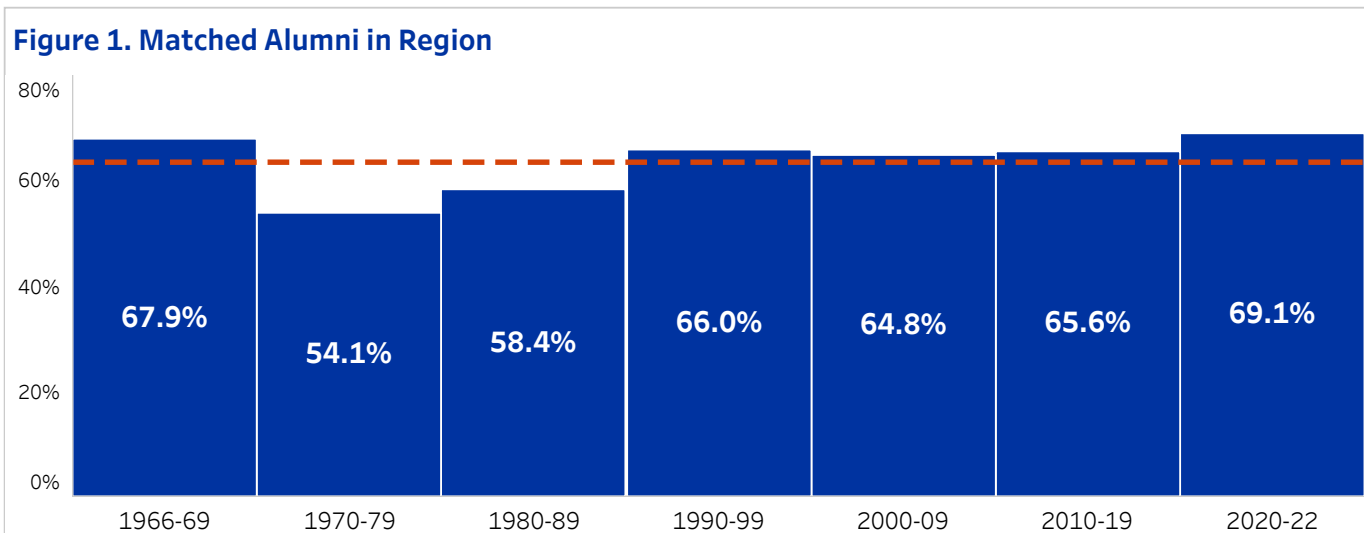
While Lightcast was able to match alumni from every academic college, some colleges had higher match rates than others. Table 2 below illustrates that regardless of degree level, the College of Engineering and the College of Business & Economics had the highest match rates of their alumni whereas the College of Health Sciences and the College of Education had the lowest match rates.

Table 2. Match Rates by Degree and Academic College of the Major						
College	Bachelor		Graduate		Overall Match	
	% Match	#	% Match	#	% Match	#
College of Arts & Sciences	42.4%	27,351	46.4%	2,246	42.5%	28,773
College of Business & Economics	53.5%	18,871	65.8%	3,493	55.0%	21,599
College of Education	19.9%	5,420	36.8%	5,760	28.9%	10,388
College of Engineering	63.7%	5,006	66.5%	2,016	64.2%	6,787
College of Health Sciences	33.3%	15,779	42.4%	3,449	34.5%	18,499
College of Innovation & Design	46.7%	150			46.7%	150
School of Public Service	41.0%	5,386	57.7%	1,028	43.3%	6,205

From these match rates we can infer that industries and professions have differing requirements and norms for job seekers. Professions in Health Sciences and Education, for example, may rely less on online profiles and more on necessary certifications. In contrast, alumni seeking careers in highly competitive professions, such as engineering and business, may rely more on networking through online profiles in order to gain a competitive edge over other job seekers. Match rates by degree award level and specific academic department are provided in Appendix A.

Employment Outcomes: Location

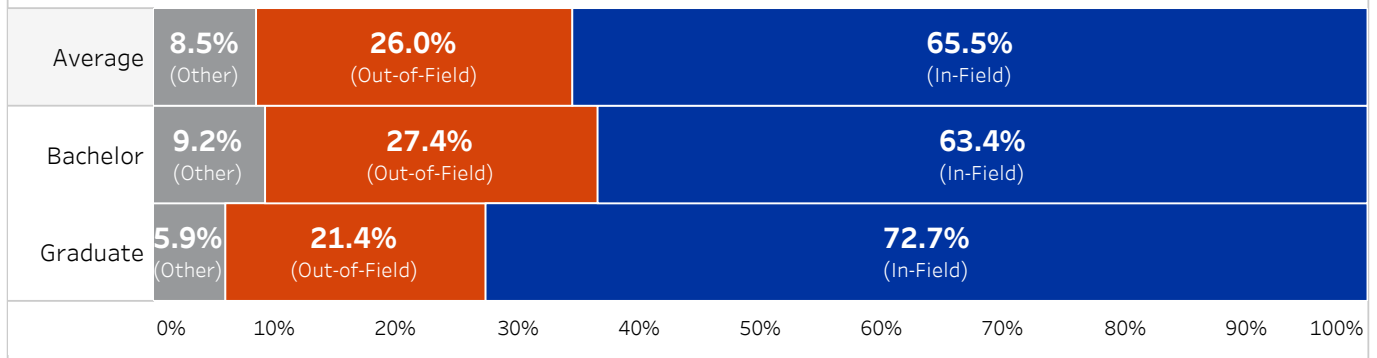
Through the analysis, Lightcast determined whether matched alumni were residing in or out of Idaho. Overall, 62% of matched alumni reside in Idaho. Moreover, Figure 1 illustrates that a higher proportion of alumni who graduated more recently live in Idaho compared to matched alumni who graduated several decades ago.



Employment Outcomes: Employed in Field

Lightcast matched occupational information with degree information to classify employment as being “In Field” or “Out of Field” matches were based on a Bureau of Labor Statistics crosswalk between the National Center for Education Statistics’ Classification of Instructional Programs (CIP codes) and the Standard Occupational Classification system (SOC codes). As illustrated in Figure 2, 66% of matched graduates were classified as employed in field, with 26% employed out of field, and 9% without a listing for current employment.

Figure 2. In-Field vs. Out-of-Field Employment



To further explore whether rates of employment in field differ based on the number of years since graduation, data for bachelor's and master's degree graduates were examined further. In other words, are graduates from earlier years more likely to work in field and more recent graduates less likely to do so? See Figures 3 and 4 below.

Figure 3. Bachelor's Graduates Employed In-Field

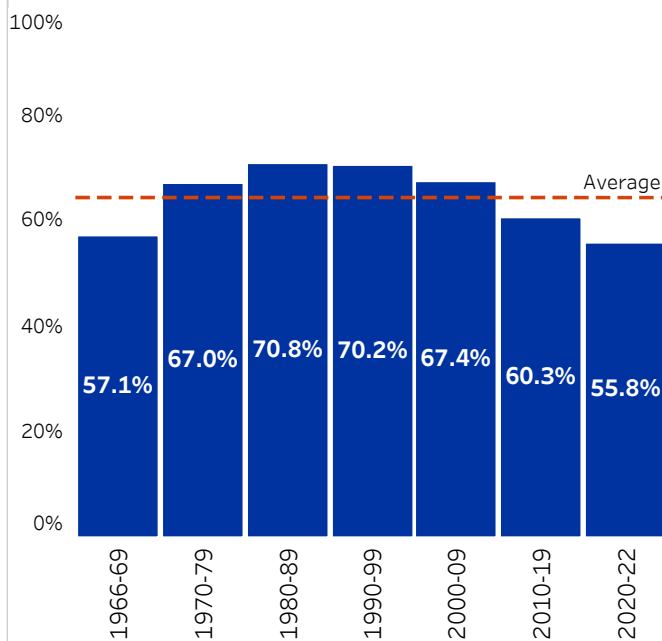


Figure 4. Graduate's Graduates Employed In-Field

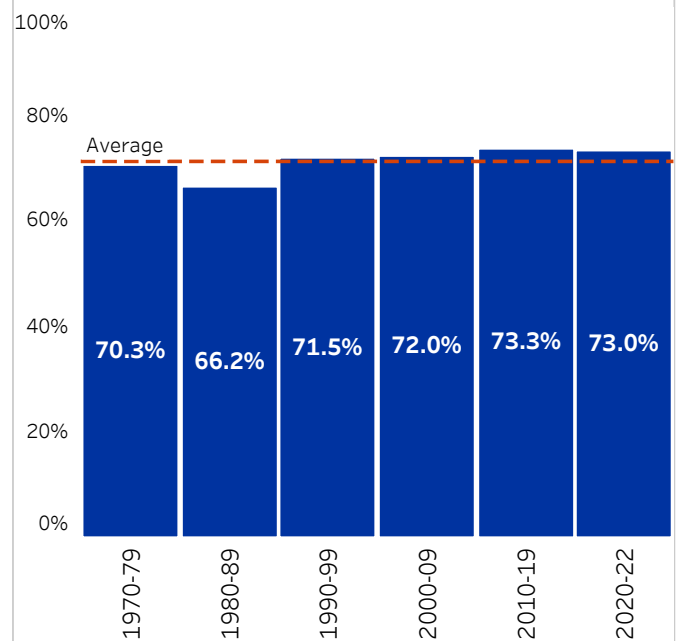


Figure 3 illustrates that baccalaureate graduates from the earliest years (1960s) and from the most recent years (2011 through spring 2022) are employed “in field” at the lowest rates. This may reflect that graduates from the 1960s likely have reached retirement age and, thus, have progressed beyond their main years of employment. Conversely, newer graduates are at the entering stages of their careers and may be still determining their career paths and/or accumulating experiences to assist in their entry to the career of their choice. Even still, 64% of the matched recent undergraduate degree graduates are considered to be employed in field. Graduate-level degree graduates, on the other hand, are fairly stable in terms of employment in field regardless of the recency of their degree award. Overall, 71% of master's degree graduates were classified as employed in field.

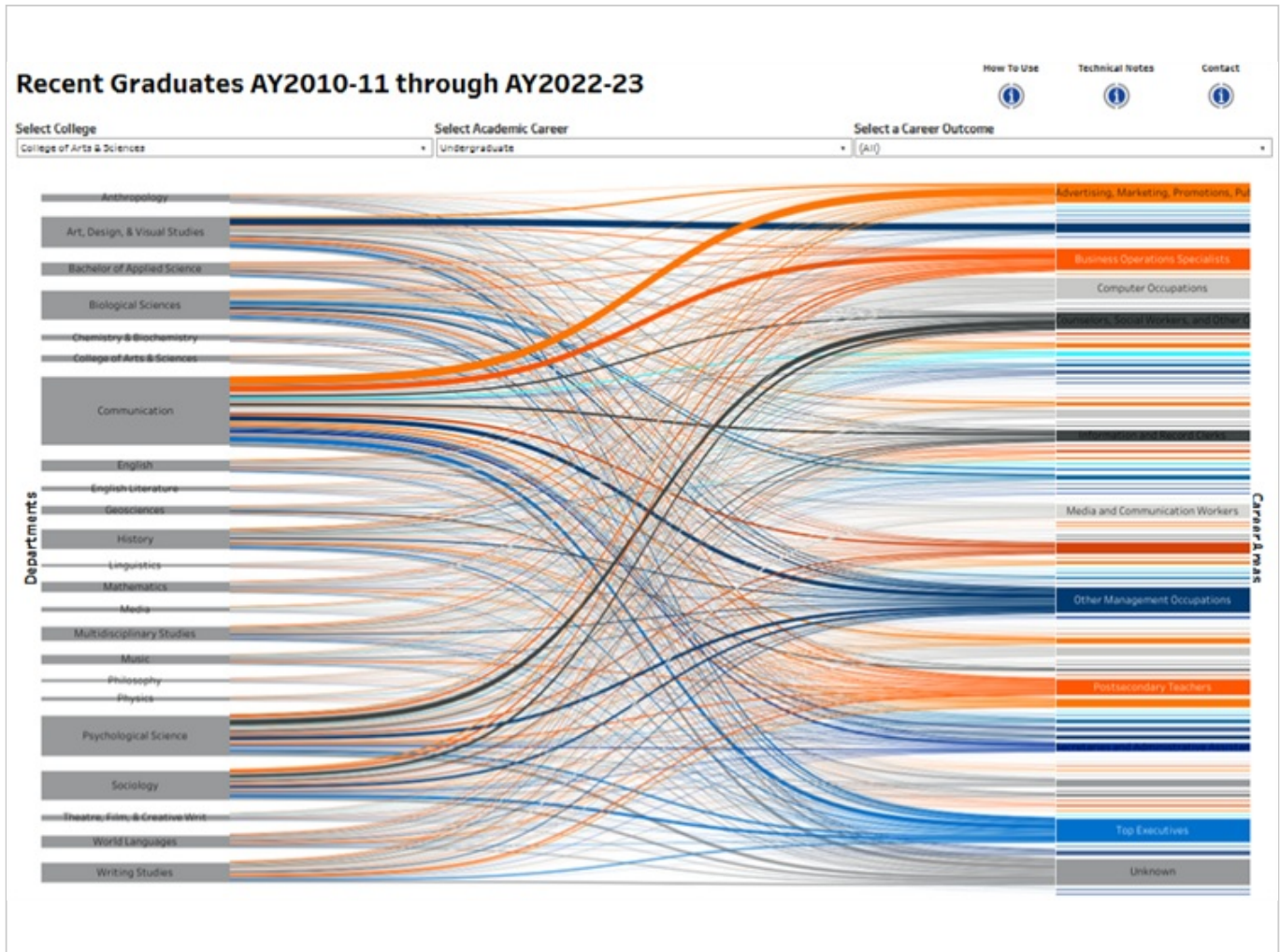
More to Explore

Two interactive dashboards are available at ie.boisestate.edu and enable further exploration of the data.

1. Alumni Career Insights (<https://www.boisestate.edu/ie/interactive-dashboards/alumni-career-insights/>)
This dashboard enables users to explore employment outcomes, employers, top skills reported, location, and in-field/out-of-field employment by degree level, department (representing field of study), and 5-year graduation bands.

2. Career Pathways (<https://www.boisestate.edu/ie/interactive-dashboards/career-pathways/>)

The path that individuals take into careers can vary tremendously depending on major field of study, years of experience, and occupational standards, licensure, or requirements. This dashboard shows the career pathways, which enables deeper exploration based on degree level, major field of study, and career outcomes.



Summary

The Lightcast Alumni Insight service provides valuable information about the graduates of Boise State University. As may be expected, the data are more complete for recent graduates and for graduates in certain professions. On the whole, 66% of all graduates who were matched are classified as "employed in field". In addition, a higher proportion of more recent graduates are living in the region (over 70%) compared to graduates from decades ago. Because the match rates vary between and within academic colleges, the information produced for specific departments or fields of study will be more valuable to some areas over others.

Appendix A. Match Rates by Degree, College, and Academic Department

(sorted by college and department)

= Number of alumni who were matched (not total number of alumni in the population)

% = Match Rate; percentage of alumni who were matched

College	Department	Bachelor		Graduate	
		#	%	#	%
COAS	Anthropology	236	46.6%	47	61.0%
	Art, Design, & Visual Studies	997	38.8%	44	30.8%
	Bachelor of Applied Science	441	45.7%		
	Biological Sciences	948	37.7%	124	42.3%
	Biomolecular Sciences			23	59.0%
	Chemistry & Biochemistry	202	43.9%	17	65.4%
	College of Arts & Sciences	211	52.0%	55	43.0%
	Communication	2,246	57.0%	83	61.9%
	English	1,254	42.1%	288	52.0%
	Games Interactive Media Mobile	70	46.7%		
	Geosciences	265	38.9%	116	47.3%
	History	647	34.3%	92	42.4%
	Mathematics	340	38.3%	53	39.6%
	Media	146	53.1%		
	Multidisciplinary Studies	448	47.7%		
	Music	286	34.5%	61	38.6%
	Philosophy	107	45.3%		
	Physics	101	49.3%		
	Psychological Science	1,320	39.5%	6	66.7%
	Sociology	950	36.3%		
	Theatre, Film, & Creative Writ	195	39.2%	54	45.8%
	World Languages	406	44.4%		
COBE	Accountancy	2,438	51.2%	418	68.9%
	College of Business & Economics			1,848	65.3%
	Economics	518	53.2%	12	60.0%
	Finance	946	54.4%		
	IT & Supply Chain Mgmt	1,270	58.4%	26	59.1%
	Management	3,495	53.1%		
	Marketing	1,551	57.2%		
	Marketing & Finance (old)	106	27.7%		
COED	College of Education			79	50.6%
	Counselor Education			169	40.1%
	Curr, Instr & Fndtnl Stds	937	19.8%	633	31.2%
	Early and Special Education	74	21.6%	160	28.4%
	Educational Technology			953	51.2%
	Elem Ed & Spec Studies			9	13.0%
	Literacy, Language and Culture	69	19.2%	193	23.7%

Appendix A. Match Rates by Degree, College, and Academic Department Cont'd

College	Department	Bachelor		Graduate	
		#	%	#	%
COEN	Civil Engineering	419	58.7%	98	61.6%
	College of Engineering	21	61.8%		
	Computer Science	745	69.1%	127	71.3%
	Construction Management	573	57.1%		
	Elect & Computer Engr	454	59.9%	162	64.5%
	Materials Sci & Engineering	175	71.1%	97	70.3%
	Mechanical & Biomedical Eng	809	68.4%	71	70.3%
	Organizational Performance			791	66.2%
COHS	College of Health Sciences			10	43.5%
	Kinesiology	1,006	39.1%	237	52.8%
	Nursing	1,558	29.8%	126	51.0%
	Public & Population Health	1,456	40.4%	198	63.7%
	Radiologic Sciences	256	26.2%		
	Respiratory Care	473	29.9%	13	39.4%
	School of Social Work	537	28.3%	881	36.9%
GRAD	Graduate College			21	60.0%
SPS	Community & Regional Planning			60	73.2%
	Criminal Justice	901	33.2%	53	41.7%
	Environmental Studies	166	44.1%		
	Global Studies	16	40.0%		
	Political Science	1,121	50.0%	30	71.4%
	Public Policy & Admin			473	58.4%
	Urban Studies & Community Dev	11	45.8%		