

## Why Do I Need to Know This? Skills and Competencies from Institution to Workplace

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### Background

- Alumni surveys are an important means of assessing institutional effectiveness in developing students' skills and competencies (Cabrera, Weerts, & Zulick, 2005)
- Some acquired skills are considered discipline-specific, many of these “transferable skills,” such as problem solving and effective communication, are applicable to a broad range of fields (Kemp & Seagraves, 1995; Stasz, 1997)
- The current study utilizes information from an arts alumni survey to explore how various types of skills and competencies, and their relationships to other demographic, occupational, and institutional variables, can provide evidence of institutional effectiveness, as well as identify areas in which institutions may need programming or curricular improvements.

### Method

- Data from the 2011 and 2012 administrations of the Strategic National Arts Alumni Project (SNAAP), a multi-institution online alumni survey designed to obtain knowledge of arts education
- 65,837 alumni from 179 different arts high schools, undergraduate, and graduate colleges or arts programs within larger universities
- Average institutional response rate was 18%
- Measures of skills and competencies:
  - A set of 16 items that asked how much the institution helped “acquire or develop each of the following skills and abilities” with a 4-point scale from “Not at all” to “Very much”
  - The same list of 16 items in a second question that asked to rate the skills on their importance to “perform effectively in your profession or work life” with a 4-point scale from “Not at all important” to “Very important”
- Participants also answered questions about their current careers, overall institutional satisfaction, institutional activities, additional degrees, and demographic information

### Results & Discussion

- Exploratory and confirmatory factor analysis (on randomly split halves of the sample) suggested a two-factor solution for both the institutional and workplace sets (see Tables 1 and 2 below)
  - Two factors tentatively named “Business-Based” and “Transferable”
- OLS regression models (with **institutional** skills subscales as outcome variables) found that:
  - Institutional satisfaction, internship participation, and cohort were significant positive predictors of institutional skills
  - Being female was a negative predictor of business-based institutional skills (females reported that their institution helped them acquire business-based skills less than males)
  - Whiteness was a negative predictor of transferable institutional skills (non-White respondents reported that their institution helped them acquire transferable skills more)
- Some of the other relationships are expected: high positive impact for participating in an internship, more recent cohorts have more salient memories of acquiring skills, gender disparities in male-dominated fields
- OLS regression models (with **workplace** skills subscales as outcome variables) found that:
  - Corresponding institutional skills, self-employment, working in an arts field, income, and gender were significant positive predictors of the importance of both workplace skills

- Having been a professional artist was a significant positive predictor of the importance for business-based workplace skills, and having a graduate degree was a significant positive predictor of the importance of transferable workplace skills
- Whiteness and younger cohort were negative predictors of both workplace skills (non-Whites and older cohorts reported the skills as being more important)
- Some expected findings: higher levels of skill development, higher income, being self-employed, and working in the field in which one received training would result in the perception of greater importance of a given skill type; older cohorts more likely to have salient workplace experiences
- Surprising finding: even though females felt they acquired *less* business skills at their institution, they rated both transferable and business skills as *more* important in their work experiences than male counterparts.

### Limitations

- Given the data collection procedures and response rates, sample may not be representative of all arts alumni and caution should be made when making generalizations
- Relied on self-reported data, which may not always be completely objective

### References

- Cabrera, A.F., Weerts, D.J., & Zulick, B.J. (2005). Making an impact with alumni surveys. *New Directions for Institutional Research, 2005*: 5-17. doi: 10.1002/ir.144
- Kemp, I.J., & Seagraves, L. (1995). Transferable skills—can higher education deliver? *Studies in Higher Education, 20*(3), 315-328.
- Stasz, C. (1997). Do employers need the skills they want? Evidence from technical work. *Journal of Education and Work, 10*(3), 205-223.

**Table 1**

*Factor Analysis: Factor Loadings Results*

<b>Transferable Items</b>	<b>Business-Based Items</b>
Critical thinking and analysis of arguments and information	Financial and business management skills
Creative thinking and problem solving	Entrepreneurial skills
Broad knowledge and education	Networking and relationship building
Improved work based on feedback from others	
Research skills	
Clear writing	
Persuasive speaking	

**Table 2**

*Confirmatory Factor Analysis: Model-fit Results*

	N	GFI	CFI	RMSEA	PCLOSE
Model statistics: Institutional Skills	28,746	.990	.989	.051	.141
Model statistics: Workplace Skills	26,416	.988	.980	.051	.142

\*Note: Strong model fit is reflected by GFI greater than .85, CFI greater than .90, RMSEA less than .06, and PCLOSE greater than .05.

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