Business, Leadership And Education: A Case For More Business Engagement In Higher Education

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ABSTRACT

Institutions of higher education prepare and develop students for the workforce, and in the coming decade, the challenge of workforce preparation will increase as the current workforce is retiring during a time of economic growth. Traditional higher education practice tasks faculty with developing appropriate curricula for students that will adequately prepare them for employment and leadership within an organization, but often this development lacks direct industry input into course content and design resulting in a gap between industry needs and graduate skills.

This study addresses both current and perceived future educational and leadership needs of a workforce in an 11 county region in the north central United States. It explores potential strategies for mitigating the skills gap as it relates to organizational leadership skills, the evolving roles of faculty, and curriculum design and application, and develops a community alliance model for business, leadership, and education.

Keywords: Higher Education; Workforce Development; Skills Gap; Leadership; Practicum

INTRODUCTION

The purpose of this study was to explore the past, trending and current education and training needs of the workforce in an eleven-county region in the north-central United States. Exploring current workforce needs enables the researcher to evaluate and synthesize opportunities and engage partners within higher education and the business community to formulate education options to meet the requirements and needs in workplace environments. These results offer insight into higher education and identify the current and future business needs, and organizational leadership skill expectations in southeastern Minnesota. The goal is to develop enrichment and educational offerings in collaboration with employers and higher education.

BACKGROUND

Institutions of higher education prepare and develop students for the workforce, and in the coming decade the challenge of workforce preparation will increase (Weeks, Rutherford, Boles & Loe, 2014). The current workforce is retiring during a time of economic growth, presenting a challenge to those preparing the future workforce (Carnevale, 2005; Sleezer, Gularte, Waldner & Cook, 2004) as jobs vacancies increase due to both market growth and current workers reaching retirement and leaving the workforce (DEED, 2017). Traditionally, higher education practice tasks faculty with developing appropriate curricula for students that will adequately prepare them for employment, but often they lack direct industry input into the course content and design (Tracy, Knight & Reiman, 2014). Lack of industry context results in content that may not adequately meet the current market needs resulting in a gap between industry needs and graduate skills (Neumann & Banghart, 2001).

LITERATURE REVIEW

The Expanding Role of Faculty

Developing higher education curricula that is meaningful to students and learners is essential (Casner-Lotto & Barrington, 2006). The responsibility of development traditionally falls on the faculty of the higher education
institution, and it is critical that faculty be in touch with the needs of the student and industry, as both stakeholder groups often lack direct input into the course design (Tracy et al. 2014). A skills gap occurs when developing consensus on factors of importance and methods to be utilized in the facilitation of higher education curriculum. In determining ways to bridge this gap, Weeks (2014) examined the role of faculty as not just the developers and facilitators of curriculum, but “knowledge brokers” that serve as a go-between the university and its external stakeholders. This additional activity provides a conduit for expansion of university-industry partnerships so that training meets the local business needs as suggested by Basken (2017).

The development of relationships and subsequently partnerships requires a substantial investment of time and resources (Dwyer, Schurr, & Oh, 1987; Johnson & Selnes, 2004). Partnerships once implemented also present the challenge to each partner of ensuring that organizational needs are met, while concurrently maximizing the value or “equity” created by the partnership (Ploetner & Ehret, 2006) and requires that leaders continue their collaborative efforts even when a specific outcome is not apparent (Sleezer et al. 2004) and stay engaged, preserving the partnership and potential for future collaboration. The quality of continued interactions among the various stakeholders is fundamental to the co-creation of value within the partnership (Fyrberg & Jüriado, 2009).

Curriculum Application Through Practicum

There is growing support among academics as observed by Alvarez and Barney (2004) and Baker and Nelson (2005) that the most effective way to engage with various industry stakeholders includes placing the learners into real-world environments that they are studying. Apprenticeships provide this opportunity by placing learners in an environment in which the skills learned can be applied and studied in real time (Alvarez & Barney, 2004; Baker & Nelson, 2005). Traditionally apprenticeships were reserved primarily for trades, but increasingly are being employed in other occupations as they often allow employers to proactively address their dissatisfaction of the quality or specificity of skills of many college graduates (Carlson, 2017). Hart Research Associates (2015) found that 73% of employers believed that the preparation of college graduates for careers would improve if the completion of a significant applied learning project were required before graduation. The Gallup-Perdue Index (2014) reported that college graduates who experienced an internship or job that enabled them to apply classroom learning, were involved in co-curricular activities, and participated on a project with a timeline longer than one semester, were 2.4 times as likely to be engaged in the workplace.

Bacon and Stewart, (2006) concluded that active learning through practicum supports increased knowledge retention for several reasons. Active learning requires students to apply learning to a context, and in so doing develop a concrete connection between the learning and the project or application. In developing this connection, retrieval cues may be created for future use in similar situations. Additionally, it is suggested that procedural knowledge is gained and retained through the implementation, creating a guide for future action within similar situational contexts (Conway, Cohen & Stanhope, 1991).

Apprenticeships have long, successful history in other countries as a method of work-force education and skills training. Apprenticeship not only allows the learner exposure to the actual environment in which they will eventually work (Vanvenhoven, 2013) it provides the opportunity for the assessment and development of the learners’ skill sets, by both the organization and academic faculty (CareerWise Colorado, 2017).

The current political environment in the United States acknowledges the need for applied learning. Nationally, the Trump administration asserts the modification of college accreditation and student aid policies to enable apprenticeships to serve a more significant role in the development of the future workforce (Basken, 2017), with the goal of expanding the use of experiential learning among college students. At the time of this study, the United States Senate is currently moving to reauthorize an updated version of the Carl D. Perkins Act for Vocational and Technical Education Act (U.S. Department of Education, 2006) for career and technical education. Current 2017 revisions include provisions to “Align CTE programs to the needs of the regional, state, and local labor market; support effective and meaningful collaboration between secondary and postsecondary institutions and employers” (U.S. Department of Education, 2006, p. 2). Revisions also include provisions to “increase student participation in work-based learning opportunities; and promoting the use of industry-recognized credentials and other recognized postsecondary credentials” (U.S. Department of Education, 2006, p. 2).
In 2015, Colorado Governor John Hickenlooper formed the Business Experiential-Learning Commission to determine what the state’s workforce needs were from a training perspective. Findings indicated that about 80% of the workforce needed some post-secondary education, however not a degree (Colorado Workforce Development Council, 2015). The changing labor market has driven communities to adapt by competing to attract and retain organizations that are anticipated to create opportunities for all. Workers today and in future workforces, will likely change careers, even occupations, several times while in the workforce (American Academy of Arts and Sciences, 2017). While certain individuals may be able to pursue alternative careers without completing additional education beyond a doctorate level, others struggle to find alternative employment as in the eyes of the potential employer, the educational credential and specific skills needed for the position are lacking (Vanderford, 2011). Proponents of apprenticeships have traditionally seen them as an effective alternative for people that for whatever reason chose not to attend college (Carlson, 2017), but still require specialized skills to perform job-related tasks.

Despite the steady development there is still, in a relative sense, poor engagement by both academics and employers, which is not in line with the commitment by government to gaining employer engagement and developing skills levels in the future workforce, which will place them nearer the higher end of the employment skills curve (Harris, Chisholm & Burns, 2013). One potential risk for employers is that once trained employees may choose to leave the organization and seek employment elsewhere (Carlson, 2017; Mangan, 2017), especially since the developing apprenticeships require a substantial investment in institution building to support this new model of education (Carlson, 2017).

Learning Reinforcement within Curriculum

Reinforcement of learning within curricula is critical to student success. Institutions with business schools must be able to manage the vertical integration of course content to satisfy accreditation requirements, like those established by the Association to Advance Collegiate Schools of Business (AACSB). These requirements must now include the use of multiple data points to evidence the accomplishment of the learning goal, document continuous improvement in assurance of learning (AoL) standards, and curricula management (AACSB International, 2013). This effort on the part of the university to map and reinforce the program requirements is viewed as an investment in the advising of students so that they can receive required assistance and guidance before falling off track (American Academy of Arts and Sciences, 2017).

Repetitive exposure the content within specific curriculum aids in the facilitation of better retention of the learning, thus improving outcomes, and has been shown in studies to be even more beneficial when spread out over a period of time as the learner can develop and utilize memory cues for knowledge applicable in similar contexts (Bacon & Stewart, 2006). Evidence also exists to support that vertical integration of inquiry-based curricula, specific to problem-solving skills can increase the learning among cohorts in an undergraduate environment (Zimbardi, Bugarcic, Colthrope, Good, & Lluka, 2013).

RESEARCH DESIGN

This study utilized a mixed methods approach, with Grounded Theory (Glaser, 1998) as a theoretical framework, to explore the perception of various workforce needs using both surveys and focus group interviews. This approach allowed the researcher to utilize the six sources of evidence presented by Yin (2012) in the evaluation of business and organizational perception including documentation, archival records, interviews, direct observation, participant observation, and physical artifacts. It also provided a structure for sample sizes larger than twelve (Yin, 2012).

Data from business and organizational survey responses was compared and contrasted with published quantitative documentation to develop an overall perception of workforce needs. Where available, the study incorporated additional qualitative and quantitative data that reflected the current environment in which the participants reside. These analyses include but were not limited to, newspaper articles, university documents and images and content on the participant university websites (Creswell, 2014).

METHOD

Methods utilized for data collection were surveys, 2017 DEED report data triangulated with public information and published research. Data collection occurred during September, October, November, and December of 2017.
Individual surveys were emailed to businesses and organizations within southeastern Minnesota. Surveys were distributed electronically and the data collected was analyzed and evaluated for themes, and synthesized and finally presented to Winona State University. The findings of this study were shared with other higher education partners in the region. The Business, Leadership and Education study used the following research questions to guide the research:

**RQ 1**: What are the workforce training and educational needs of a region in the north-central United States as they relate to business and organizational leadership skills and the support of workforce development.

**RQ 2**: What steps can be taken by higher education to address these needs?

**DATA ANALYSIS**

Data gathered was sorted, analyzed and synthesized in a manner consistent with the Grounded Theory model, including participant perceptions, literature, and quantitative data. The data was cataloged and formatted and shared with all participants and stakeholders both in business and industry as well as higher education to be used as a tool for the formation of future educational offerings.

**FINDINGS**

The purpose of this study was to explore and identify the workforce training and educational needs of an eleven-county region in north-central United States business community as it relates to business and organizational leadership skills. This study also queried the steps taken by higher education to address these needs? Answering these research questions will enable higher education institutions to effectively engage partners and external stakeholders within higher education and the business community to formulate education and training options that can be used to address these needs.

Focus Group participants indicated that the most significant needs for leadership skills were “Basic Business Skills” or “Business 101”. Several participants indicated that the greatest challenge they had was in operation of the business, not the performing the tasks that drove them to become entrepreneurs.

Skills and education timing for participants was based on when they transitioned to a leadership role. The most common response was, “as soon as it is determined that new skills are needed,” with the remaining responses essentially equal. As is relates to skills development and the changing workforce, one person observed, “usually, by the time you know you need them, it’s too late;” further supporting the need for ongoing skills training and development.

Methods survey participants utilized to assess skills gaps or training deficits within their organization. The top three responses, Direct Observation, Consultations, and Work Samples making up 65.3% (n=181) of the total responses shown in Figure 2.
Figure 1. Skills & Content Required for Leadership

- GENERAL BUSINESS SKILLS: 19.57%
- TEAM BUILDING / PEOPLE SKILLS: 17.39%
- REGULATORY / LEGAL: 10.87%
- ACCOUNTING: 10.87%
- MARKETING: 10.87%
- HUMAN RESOURCES: 8.70%
- INTELLECTUAL PROPERTY MANAGEMENT: 6.52%
- PROJECT MANAGEMENT: 6.52%
- RISK MANAGEMENT: 4.35%
- CRITICAL / SYSTEMS THINKING: 4.35%

N=46

Figure 2. Methods Utilized for Determining Skills Gaps

- DIRECT OBSERVATION: 30.69%
- CONSULTATION W/ KEY PERSONS: 20.22%
- WORK SAMPLES: 14.44%
- INTERVIEWS: 9.39%
- SURVEYS: 7.22%
- FOCUS GROUPS: 6.14%
- TESTS: 4.33%
- RECORDS AND REPORT STUDIES: 4.33%
- OTHER: 3.25%

N=277
Survey participants identified the best opportunities for growth and development of employees. Essentials of Leadership and Conflict Management each represented approximately 20% (n=60, n=58) of the whole followed by Technical skills (18.5% (n=54) and Change Management skills (13.99% (n= 41). These responses are illustrated in Figure 3.

**Figure 3.** Organizational Areas for Growth

| Area                        | Percentage |
|-----------------------------|------------|
| Essentials of Leadership    | 20.48%     |
| Conflict Management         | 19.80%     |
| Technical Skills            | 18.43%     |
| Change Management           | 13.99%     |
| Strategic Planning          | 10.58%     |
| Selling Skills              | 6.14%      |
| Marketing                   | 5.46%      |
| Other                       | 5.12%      |

N=293
The participants surveyed indicated that an employee’s degree or certification (n=52) would not benefit the organization whereas half of the group indicated that a degree/certification would be beneficial. Participants identified a preference for online and on-site customized learning over other both offsite and pre-employment internships or apprenticeships (Figure 4).

**Figure 4.** Preferences on Accessibility of Training

Participants were also asked to convey preferences as to the accessibility of training. Sixty percent of participants preferred a combination of each (n=58) with 27% (n=26) favoring face-to-face only. This data illustrates that while online learning is certainly a tool to be used, it is perceived as far less effective by itself than a combination of online and face-to-face, with only 13% (n=13) of participants choosing online as the primary preferred method.

Furthermore, when asked about the preferred frequency of training, participants favored once a month, (44%, n=42) while the second most selected was weekly (20%, n=19). The other category asked for an explanation. The researcher was able to synthesize the other responses and extract several additional re-occurring categories. These categories include one time, bi-monthly, quarterly and as needed.

Most organizations budgeted for and covered the cost, or reimbursed employees, 13% (n=12) of the organizations either have the employee pay for training or cover the costs in another manner (Figure 5).
RECOMMENDATIONS

Research Question #1

What are the workforce training and educational needs of a region in the north-central United States as they relate to business and organizational leadership skills and the support of workforce development.

Data suggested a strong need for “basic business skills” such as accounting, human resources, legal, intellectual property, and regulatory skills at both the undergraduate and post-doctorate level, especially as post-doctorate MBA’s become an increasingly popular choice for people possessing a doctoral degree finding the need for new business skill sets. Equally important as the knowledge of basic business skills was the ability to effectively apply this knowledge in the workplace immediately. The ability to show proficiency in project management and real-world application of business curriculum was expressed multiple times as critical to the success of students entering the labor force.

Based on the data, literature, and this feedback it is recommended that higher education increase and reinforce the practicum components of programs through internships, apprenticeships, and industry partnerships. Practicum allows a deep emersion student experience into a real-world environment, and because faculty involvement allows for minimal risk, it is still part of the safe learning higher education learning experience. Additionally, it is recommended that practical application of skills start as soon as the second semester of the first year of the program to reinforce learning while applying new skills incrementally.

Research Question #2

What steps can be taken by the higher education community to address these needs?

While no one model has proven to alleviate the skills gap, it is clear that engagement learning and mentorship has the support of businesses and organizations alike in an eleven county region in the north-central United States as the unemployment rate remains low. The role of higher education faculty is evolving and expanding from curriculum developer and facilitator to one that includes the role of partnership developer, knowledge broker, and agent between the student learner, higher education and their respective career businesses and organizations. This expanded role is
critical in bridging the skills gap and businesses and organizations are more willing to engage in these types of collaborations. As illustrated in Figure 6, greater communication and engagement allows for real-time feedback and input on workforce needs from business and organizations, that can be incorporated quickly into both program and Adult and Continuing Education curriculum, with the ultimate goal of bridging the skills gap.

Investment in brokering or facilitating workforce partnerships is recommended for all higher education programs. With the absence of a true marketing function, the burden of marketing and promoting the offerings of higher education is placed on the faculty and staff of colleges and universities to engage, and become a two-way conduit for information. As evidenced in the literature review, when these functions are executed as a true partnership, it benefits all stakeholders by better qualifying the student’s needs and comparing and contrasting those with organizations willing to help develop and apply program learning.

Based on the survey and interview data it is clear that ongoing community outreach will benefit students, high education relevancy, and workforce engagement. In this study, various external stakeholders in an eleven-county region in the north-central United States expressed interest in and elected to participate with the understanding that the goal of this project was to assess better organizational needs and share the findings with all stakeholders. This network of both business and non-profit organizations proved vested in the effort put forth in assessing organizational needs and developing an engaged spirit of collaboration between higher education and the business communities.

The Community Alliance Model for Business, Leadership, and Education (Figure 6) was developed based on the analysis of the data using Grounded Theory (Glaser, 1998). This model outlines a naturally occurring relationship between student, business and higher education, past engagement levels and what the research identifies as ideal engagement for all stakeholders.
This study utilized established community channels such as the local economic development association, chamber of commerce, and business education outreach. It is recommended not only that this work continue, but that participation is expanded to involve more stakeholders within each community in an eleven-county region in the north-central United States to garner improved participation. The researcher believes that building and implementing a strategic plan would be beneficial in continuing to gather real-time, actionable data, to formulate better strategies and improved program offerings in this area.

**RECOMMENDATIONS FOR FUTURE RESEARCH**

Stakeholders acknowledged that this type of research is beneficial, and has value as an ongoing process or initiative for continuous improvement between the business and education communities. It is recommended that additional research be conducted to solicit the levels of interest and the readiness of businesses and organizations in this area to
actively collaborate with schools, colleges, and universities to implement practicum-based learning programs and begin to identify components of those potential programs.

LIMITATIONS

Limitations of this study included limited response rates. Participants may have been biased based on the current low unemployment rate and the need to hire employees in their industry.

DECLARATION

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Christopher Hahn is a native of Winona, MN and has over 20 years of experience in officially licensed promotional product sales, business development and consulting. His professional experience includes working with a diverse group of organizations including Fortune 500 companies and professional sports leagues such as NASCAR, the U.S. Olympic Committee, NFL, and NBA. Chris currently works as a business consultant in the Rochester, MN area, and is teaching marketing as an adjunct instructor in the College of Business at Winona State University spring semester of 2019.

Chris holds a Bachelor's degree from the University of Wisconsin-Stout and a Master’s Degree in Leadership Education from Winona State University. He has co-authored research on developing the organizational leadership brand, and is an active academic speaker at several regional universities in both the Minnesota and Wisconsin state university systems. An avid outdoorsman, Eagle Scout and Executive Board Member with the local Boy Scouts of America, Chris currently resides in St. Charles, MN with his wife and two children.

Dr. Jeanine Gangeness serves as the CEO responsible for leading the Winona State University -Rochester branch campus and is the Dean for the School of Graduate Studies. She is a results-driven visionary leader with budget acumen and a talent focused team builder. Her authentic leadership style engages internal and external constituencies resulting in collaborative business and higher education programming. Dr. Gangeness engages faculty, staff and administrators to develop and renovate facilities, including a historic building. She collaborates with her team to improve enrollment, maintain accreditation, and empower faculty to lead. She creates a work environment where individuality is honored, and the culture is empowering.

REFERENCES

AASCB International (2013). Association to Advance Collegiate Schools of Business International, 2013 Eligibility Procedures and Accreditation Standards for Business Accreditation. Retrieved from https://www.aacsb.edu/-/media/aacsb/docs/accreditation/business/standards-and-tables/2018-business-standards.ashx

Alvarez, S. A., & Barney J. B. (2004). Organizing rent generation and appropriation: Toward a theory of the entrepreneurial firm. Journal of Business Venturing, 19, (5), 621-635.

American Academy of Arts and Sciences (2017). The future of undergraduate education, the future of America. Commission on the Future of Undergraduate Education. Retrieved from: https://www.amacad.org/cfue.

Baker, T., & Nelson R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. Administrative Science Quarterly, 50, (3), 329–366.

Bacon, D. R., & Stewart, K. A. (2006). How fast do students forget what they learn in consumer behavior? A longitudinal study. Journal of Marketing Education, 28(3), 181-192. doi:10.1177/0273475306291463

Basken, P. (2017). Trump will push apprenticeships, using accreditation and student aid. The Chronicle of Higher Education, June 28, 2017.
APPENDIX I

Business and Education Partnership – Survey Questions (SQ)

General Business Needs Assessment

SQ1. What are your methods for identifying and addressing skills gaps and/or training deficits in your organization? (check all that apply)

SQ2. What areas of training would best enable your employees to grow? (check all that apply)

SQ3. Would educational certifications/degree programs be beneficial in addressing your future workforce needs?

SQ4. What training format would be most conducive to the employees in your organization? (choose one)

SQ5. What delivery method for training would be most accessible for your employees? (choose one)

SQ6. Ideally, how often would your employees attend training?

SQ7. Ideally, over what period of time would your employee training occur?

SQ8. How is your employee training and professional development funded? (check all that apply)

Demographic Questions: - (Thresholds taken from DEED, 2017)

SQ17. How many employees does your organization have?

SQ18. Please indicate your organizations annual revenue

SQ19. In what county is your organization located?