

Students' perceptions of workforce readiness compared to industry expectations

Rachel E. Hendrix
Graduate Assistant
Mississippi State University/ School of Human Sciences
P.O. Box 9745
Mississippi State, Mississippi 39762
(662-325-7696)
reh183@msstate.edu

Carley C. Morrison
Visiting Assistant Professor
Mississippi State University/ School of Human Sciences
P.O. Box 9745
Mississippi State, Mississippi 39762
(662-325-0749)
carley.c.morrison@msstate.edu

Students' perceptions of workforce readiness compared to industry expectations

Introduction

The United States is currently experiencing a skills gap between the abilities of employees and the expectations of employers (Casner-Lotto, Barrington, and Wright, 2006). Research has indicated that not only are many graduates not adequately equipped with the skills that they need to succeed in the workplace (Robinson & Garton, 2008), they often overestimate the extent of the capabilities that they do possess (Jaschik, 2015). *The Prepared U Project* (Bentley University, 2014) identified postsecondary institutions as important centers of workforce development where career training and guidance can begin. However, Hodge and Lear (2011) noted that many students do not recognize the value of the skills that they are taught, and many professors are unaware of the ever-shifting and evolving needs of the working world.

Conceptual Framework

In order to understand how colleges can better prepare students for their future careers, their current perceptions towards workforce readiness skills must be measured and compared to the actual expectations of the working world. This issue has been examined in other career fields (Hickey, 2009; Hodge & Lear, 2011; Kavanagh & Drennan, 2008; Landrum, Hettich, & Wilner, 2010), but few studies have looked at what is necessary to succeed in the modern agriculture industry. Goerker, Smith, Fernandez, Ali, and Goetz (2015) expect agricultural fields to experience job growth through 2020, and estimate that approximately 58,000 positions requiring bachelor's degrees or higher will open every year.

If American agriculture is expected to feed and clothe a growing world, it is essential that these positions be filled by quality candidates who can capably display vital skills on day one of their employment. The importance of this need is stated in research priority three of the American Association for Agricultural Education's National Research Agenda (Robert, T. G., Harder, A., & Brashears, M.T., 2016). This study intends to compare college agriculture students' perceptions of career skills against the needs of actual employers in the agricultural industry.

Methodology

Participants ($N = 59$) in the study were asked to complete a questionnaire originally used by Landrum, Hettich, and Wilner (2010) to examine workforce readiness perceptions of psychology graduates. The survey was reviewed and edited for relevance to the agriculture industry. IRB approval was obtained before data collection, and all students signed a consent form. Participants were given time to complete the instrument during class. The researchers collected all questionnaires and data were analyzed using descriptive statistics including means and standard deviations. Participants were presented with a list of 54 job skills that included competencies such as "present information verbally to others", "handle conflict maturely", and "work to achieve organizational goals". From this list, they were asked to rank the 10 skills they viewed as most important to workplace success, with 1 = most important and 10 = least important.

In order to identify the work skills sought by agricultural employers, researchers analyzed 43 entry-level announcements for careers in the agricultural industry. Skills were grouped by themes such as "communication," "flexibility and adaptability," and "time management and

organization.” These themes were compared to the skills identified by the students who responded to the questionnaire.

Results

Students who responded to the questionnaire ($N = 59$) were members of two undergraduate agriculture classes at Mississippi State University, and ranged in age from 20 to 50 years old ($M = 22.10$, $SD = 3.89$), with 42 men (71.2%), 16 women (27.1%), and one undisclosed. The majority of respondents were white (93.2%), completing an agriculture degree (94%), and preparing to enter an agriculture related-career upon graduation (84%). Results allowed for the creation of two top 10 lists of job skills. The first list used item frequency to assign placings, and the second took student ratings into account as a means for breaking ties. In order from most important to least important, the top 10 overall skills were: “work well with others,” “adapt to change,” “work independently,” “teach and learn from others on the job,” “manage several tasks at once,” “possess a positive attitude towards work,” “handle conflict maturely,” “demonstrate highly developed social skills,” “function effectively in stressful situations,” and “possess self-discipline, including punctual attendance and reliability.”

The analysis of agriculture-related job announcements revealed skills involving communication are highly sought after, with verbal communication appearing in 27 announcements (62%) and written communication in 18 (41%). Other desired skills included time management and organization ($n = 14$, 32%), flexibility and adaptability ($n = 10$, 23%), working independently and/or without supervision ($n = 8$, 18%), problem and conflict management ($n = 7$, 16%), learning on the job ($n = 4$, 9%), and personal integrity and responsibility ($n = 3$, 6%).

Conclusions and Recommendations

While participants do have a basic understanding of what skills are needed in the workplace, there are many areas in which their views do not match current employers'. This can be seen especially when comparing students' ideas of necessary skills with employers' demands. For example, both top 10 lists indicate that participants placed value on being productive, reliable workers who were capable of solving problems and building positive relationships with others. While some employers did seek these skills, they were more desirous of applicants that showed aptitude in speaking, writing, and presenting.

It is of particular interest to note the disparity in beliefs regarding communications skills, as they were the most demanded skill from employers but were viewed as less important by participants. Only one communication competency – “demonstrate highly developed social skills” – even made the final top 10 list, and it placed quite low. Two other related skills – “receive and use both positive and negative feedback,” and “present information verbally to others,” – made the first top 10 list, but did not see high enough frequencies or rankings to be included on the final list. No written communications skills made either top 10 list, which indicates that participants likely do not understand their necessity or ubiquity in the working world.

It is recommended that college personnel stress the importance and usage of behavioral skills in career situations – most importantly those related to written and oral communications – and guide students in developing them throughout their college career. Further research should be performed to identify how workforce skills required by employers vary by industry or location.

References

- Bentley University (2014). The preparedu project an in-depth look at Millennial preparedness for today's workforce. Retrieved from https://www.bentley.edu/files/prepared/1.29.2013_BentleyU_Whitepaper_Shareable.pdf
- Casner-Lotto, J., Barrington, L., & Wright, M. (2006). *Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st Century U.S. workforce*. Retrieved from: http://www.p21.org/storage/documents/FINAL_REPORT_PDF09-29-06.pdf
- Goerker, A.D., Smith, E., Fernandez, J.M., Ali, R., & Goetz, R. (2015). *Employment opportunities for college graduates in food, agriculture, renewable natural resources, and the environment*. Retrieved from <https://www.purdue.edu/usda/employment/>
- Hickey, M.T. (2009). Preceptor perceptions of new graduate nurse readiness for practice. *Journal for Nurses in Staff Development*, 25(1), 35-41. doi: 10.1097/NND.0b013e318194b5bb
- Hodge, K.A. & Lear, J.L. (2011). Employment skills for the 21st century workplace: The gap between faculty and student perceptions. *Journal of Career and Technical Education*, 26(2), 28-31. Retrieved from <https://ejournals.lib.vt.edu/JCTE/article/view/523/722>
- Jaschik, S. (2015, January 20). Well prepared in their own eyes. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/news/2015/01/20/study-finds-big-gaps-between-student-and-employer-perceptions>
- Kavanagh, M.H., & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*, 48(2), 279-300.
- Landrum, R.E., Hettich, P.I., & Wilner, A. (2010). Alumni perceptions of workforce readiness. *Teaching of Psychology*, 37, 97-106. doi: 10.1080/00986281003626912
- Roberts, T. G., Harder, A., & Brashears, M. T. (Eds). (2016). *American Association for Agricultural Education national research agenda: 2016-2020*. Gainesville, FL: Department of Agricultural Education and Communication.
- Robinson, J.S., & Garton, B.L. (2008). An assessment of the employability skills needed by graduates in the college of agriculture, food, and natural resources at the University of Missouri. *Journal of Agricultural Education*, 49(4).