Crossroads between Workforce and Education

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Abstract

Concern is growing among industry leaders that students may not be obtaining the necessary skills for entry into the labor market. To gain an understanding of the perceived disconnect in the skill set of graduates entering the health information workforce, a survey was developed to examine the opinions of educators and employers related to graduate preparedness. The concern related to graduate preparedness is supported by findings in this research study, in which those working in industry and those in academia noted a disconnect between academic training and preparedness to enter the labor market. A statistically significant difference was found between labor leaders and academics in their assessment of graduates' preparation in the areas of technical, communication, and leadership skills. Educators noted higher levels of preparedness of students with regard to professional and technical skills and leadership skills, while both educators and industry respondents noted a need for improved employability skills (e.g., communication skills and workplace etiquette). No difference was found between the two groups with regard to the need to increase apprenticeships and professional practice experience to cover this gap in formal training. Finally, when asked how the federal government might assist with preparing students, more than half of the respondents noted the importance of apprenticeships and funding for these opportunities.

Introduction

Health information professionals play an integral role in ensuring the quality and integrity of health information and the privacy and security of protected information to support clinical and administrative workflows and personal and population health standards. According to the US Bureau of Labor Statistics, the anticipated increase in employment in this field is much faster than average, with a 15 percent increase in health information management–related technician jobs and a 17 percent increase in management jobs predicted between 2014 and 2024.[1,2] Graduates of health information programs therefore will need to enter the workforce prepared to immediately contribute to their employers. Increasing concerns have been noted regarding the gap between the skills that employers need and expect of recent graduates and the skills that graduates attain through academic preparation.

A 2007 report by Jones and Abraham suggests a disconnect in perceptions of employers and educators with respect to the skills and training required for entry-level employees.[3] While employers place a heavy emphasis on strong technical and interpersonal skills, the primary focus of academia is on ensuring that students are familiar with the curricula and have the ability to learn. Findings from a recent Gallup study show that 96 percent of academicians believed their academic offerings were producing students with market-ready skills, while only 11 percent of employers felt traditional models of education met their demands.[4]

Studies in fields outside of health information have found varied levels of employer perceptions of preparedness among entry-level employees. In a study of certified athletic trainers, approximately 90 percent of employers noted academic and clinical preparedness, but 69 percent noted areas that must be learned through experience in the workplace setting.[5] A McKinsey report noted a 40 percent increase in the need for individuals trained in data analysis, which encompasses the sectors of healthcare, education, manufacturing, transportation, finance, and insurance, among others. McKinsey analysts suggested that the skills required of these employees include deep analytical talent, critical thinking, and team building, which are not evident in academic curricula.[6] A Deloitte and Manufacturing Institute study showed that more than 600,000 manufacturing jobs were unfulfilled because of the lack of workers with the science, technology, engineering, and math skills required of the jobs.[7]

Although numerous studies report evidence of a skills gap, no standard definitions of skills exist across all sectors. Cappelli suggests that there is a surplus of individuals with the technical skills required to fill the available roles, yet candidates lack skills such as interpersonal communication, critical analysis, decision making, team building, and leadership.[8] Similarly, a

multiyear study of individuals in accounting careers found that employers noted the need for growth in areas including "effective communication skills" and "oral communication skills."[9] In addition, as noted by Davidson, Brown, and Davison, although employers may indicate that entry-level employees possess adequate "basic knowledge, technical, and analytical skills," these employees may lack full development of the skills needed to take on leadership roles or communicate with others.[10]

To ensure the development of work-ready entry-level individuals, educators and employers often use internships or apprenticeships to prepare graduates to join the workforce. Rao's 2014 findings indicate that effective collaboration is needed among industry, faculty, students, and educational institutions to create programs that support "soft" skills of personality traits and behavior through training.[11] The importance of internships and similar activities to prepare students to join the workforce is well documented,[12] and a wide range of professions encourage this type of hands-on learning to prepare and engage students.[13] In addition to benefitting the student, internships and apprenticeships offer employers the opportunity to observe individuals' skill sets, evaluate their strengths and weaknesses, and potentially identify new candidates for employment.

A 2009 National Association of Colleges and Employers survey found that 76.3 percent of responding employers preferred to hire students with previous work experience, including internships or similar experiences.[14] While not the primary focus of educational curricula, preparing students to be work-ready should be an integrated and imperative segment of formal education and training programs.[15] Employability skills (often referred to as "soft skills" or "generic skills") are developed outside of the technical curricula and can be applied across market sectors and roles.[16]

To examine employers' and educators' perceptions of graduate preparedness among health information students joining the workforce, the AHIMA Foundation conducted a survey of individuals in academia and those working in the business sector. Employer and educator perceptions of student preparedness were noted, and both groups highlighted the importance of building employability skills and ensuring strong relationships between the groups. In addition, more than half of the respondents noted the importance of apprenticeships and federal funding for these opportunities to deliver additional on-the-job training.

Methods

After engaging in dialogue with experts in the health information field, the authors of this study developed a survey to examine the opinions of educators and employers related to graduate preparedness. The survey contained five questions regarding professional competency and workforce readiness, as well as questions related to demographic information. Data were collected from a stratified random sample of industry leaders and educators. The survey was conducted verbally by telephone interview, and the questions included ranked responses according to a Likert scale, as well as yes/no and free-response questions and comments. In total, outreach to 180 industry leaders, including 44 educators and 136 individuals from the health information business sector, was attempted via phone or e-mail. Those from the business sector represented settings including direct patient care, clinical care, consulting services, human resources, and others, with a majority holding executive or director-level positions. Those from the academic sector included program directors of associate and baccalaureate degree programs in health information. Sixty-eight individuals could not be reached (three attempts made), three were unable to be reached because of invalid contact information, and nine declined to participate. Survey responses were obtained from a total of 100 individuals: 66 participants from the business sector and 34 educator participants.

Results

Findings concerning the areas of professional and technical skills, leadership skills, and employability skills are reported in Table 1. Results show that more employers than academics identify a gap between skills acquired through academic preparation and skills required to work in the market. Significant differences were found between industry leaders and educators regarding graduates' preparedness in terms of employability skills (communication skills and workplace etiquette) (76.4 percent vs. 62.2 percent), professional and technical skills (76.5 percent vs. 48.5 percent), and leadership skills (61.7 percent vs. 25.7 percent).

Table 1: Survey Responses

Question	Educator Respondents (%)	Industry Respondents (%)

Is there a disconnect between higher education (graduate preparation) and employer needs?	67.6	80.3**
Do you feel that the federal government can assist in better preparing students to meet the needs of the healthcare market?	89.4	82.4
In general how prepared do you believe students coming out of college are in meeting your needs in terms of:		
Professional and technical skills	76.5	48.5**
Leadership skills	61.7	25.7**
Employability skills	76.4	62.2*
How important is experiential learning to help prepare students to join today's healthcare workforce?		
Professional practice experience/internship	97.1	95.4
Apprenticeship	67.7	83.4
Other experience (previous employment, volunteering)	67.6	66.7

* Significant at $p < .05$.
** Significant at $p < .01$.
NS = not significant

The qualitative survey questions revealed variance between the skills possessed by new graduates and second-career students or those returning to the workforce. While second-career students often possess more business acumen and improved communication skills, new graduates may be more adept at approaching new technology and learning skills associated with computer systems.

Survey questions related to the importance of experiential learning to prepare students to join the workforce resulted in similar responses from both groups (see Table 1). On the importance of professional practice experiences or internships, 97.1 percent of industry leaders and 95.4 percent of educators indicated that these experiences are very or critically important. For apprenticeships, no significant difference was found in the percentages of industry leaders and educators (83.4 percent and 67.7 percent, respectively) who rated these types of opportunities as very or critically important. The third experiential learning category included any other experience such as prior employment and volunteering, and the response was similar among the two groups of participants (educators, 67.6 percent; industry leaders, 66.7 percent).

Although respondents in both groups noted a disconnect between graduate preparation and employer needs, the percentage of industry leaders reporting a disconnect was significantly higher than the percentage of educators reporting a disconnect (educators, 67.6 percent; industry leaders, 80.3 percent). In describing the disconnect, respondents noted the need for apprenticeship, internship, and/or professional practice experience sites (42.7 percent) and the need for strong relationships between industry and academia (40.6 percent) as issues of greatest concern. As shown in Table 2, respondents also indicated the importance of identifying knowledge gaps and delivering additional training (11.5 percent) and working with human resources and other personnel to increase recognition of health information professions (5.2 percent).

Table 2: Perceptions of the Disconnect between Higher Education and Employer Needs

Response	Percentage of Respondents
Need for apprenticeships/internships/professional practice experience sites	42.7
Need for relationships/partnerships/advisory boards	40.6
Need to identify knowledge gaps/deliver additional training	11.5
Need to increase recognition of the health information profession/work with human resources personnel	5.2

To address these disconnects and ensure that those in the health information business sector and those in academia are working together to prepare the next generation of students, respondents were asked how the groups could better work with one another. Respondents noted the need to ensure that students possess specific professional and technical skills prior to joining the workforce (42.2 percent) as well as the need to provide hands-on training (14.1 percent) (see Table 3). In addition, ensuring communication between educators and employers (29.7 percent) and ensuring that the curricula offer competencies for the job roles of the future (10.9 percent) were noted as being critically important.

Table 3: How Higher Education and the Business Sector Can Work Together to Prepare Students to Address Future Workforce Needs

Response	Percentage of Respondents
Specific professional and technical skills needed	42.2
Communication between educators and employers needed	29.7
Hands-on training needed	14.1
Changes/updates to curricula needed	10.9
Student expectations need to match reality	3.1

Finally, respondents were asked how the federal government might assist in preparing students to meet the needs of the healthcare market. More than half (66.3 percent) noted the importance of apprenticeships and recommended the provision of federal funding for these opportunities and for scholarships (see Table 4). In addition, support for research (15.0 percent), training programs for individuals returning to the workforce or second-career students (8.8 percent), and mandates or other legislation to require certifications or credentials (5.0 percent) were noted as areas for consideration.

Table 4: How the Federal Government Can Assist in Preparing Students to Meet the Needs of Today's Healthcare Market

Response	Percentage of Respondents
Apprenticeships/funding for apprenticeships and scholarships	66.3
Grants/research funding	15.0
Training support	8.8
Mandates/legislation	5.0
Other incentives	5.0

Discussion

Findings of this study are consistent with prior research noting distinguishable gaps between educators and employers in perceptions of graduate preparedness for the workplace. Graduates of health information programs entering the workforce often need additional training or skills development beyond the curriculum. Responses of industry participants indicated that graduates who have obtained prior work experience, volunteer experience, or professional practice experience enter the workforce better prepared than those who do not. In particular, graduates of second-career programs possess more business acumen and improved communication skills, while new graduates are more adept at learning new computer systems and approaching technology. Respondents noted that students joining the workforce may need additional specific training or skills development depending on the role they will be taking. While employers often provide on-the-job training, apprenticeships or similar opportunities could help to supplement these programs and ensure the provision of hands-on training.

Limitations of the study were the small sample size, the diversity of respondents, and the broad categorical definitions of skills. This study incorporated responses from industry experts and educators in health information only. Further research should incorporate a greater sample size with larger diversity among respondents to demonstrate consistency of these findings. The competencies in this study were grouped according to categories of professional and technical skills, leadership skills, and employability skills. Increased granularity in the skill and competency definitions would allow assessment of specific skills such

as coding, documentation, team building, communication, and workplace etiquette rather than broad categorical skill groupings. Clarity may be attained through greater delineation of employability skills required for entry-level industry employment.

Additional study is needed to assess the consistency of the findings, increase the scope of the research, and further identify the implications of industry and education sector partnerships that are intended to increase the skill set of graduates entering the workforce. Industry and academia may benefit from further study regarding perceptions of graduates' preparedness following professional practice and/or apprenticeship experiences. A comparison of graduates with professional practice and/or apprenticeship experiences and graduates without either opportunity may yield insight to the value of these programs. Further, future study should include respondents from multiple industry sectors outside of the health information field to provide a benchmark analysis of the perceived disconnect between workplace competency requirements and academic preparedness in other sectors of industry.

Conclusion

The purpose of this study was to gain an understanding of the perceived disconnect between academic preparation and employer needs in the skill sets of graduates entering the health information workforce. In recent years, industry leaders have expressed concerns that graduates no longer possess the necessary skill sets required for employment. According to the National Science and Technology Council, "The health and longevity of our Nation's citizenry, economy, and environmental resources depend in large part on the acceleration of scientific and technological innovations, such as those that improve health care, inspire new industries, protect the environment, and safeguard us from harm."[17] To meet these needs, it is imperative that industry, education, and business sectors embrace collaborative efforts to support the preparedness of graduates to enter the health information workforce.

According to the analysis of survey responses, academic programs should promote real-world experience through professional practice and/or apprenticeship programs. Apprenticeship and similar programs offer hands-on training and are noted for supporting the continued learning of recent graduates. The efforts of academic curricula must be supported by the engagement of key industry and business professionals. This study has shown that a skills gap has been recognized by both employers and educators in the field of health information. To better understand this gap, future research with additional questions and an expanded sample extending across market sectors is necessary to provide a more granular assessment of the nature of this disconnect.

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Notes

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