The Value of Industry Certifications in ITE

Panel Discussion

Alan Rowland

CompTIA  
3500 Lacey Road, Suite 100

Downers Grove, IL 60515

arowland@comptia.org

Thomas Ayers

Broward College  
6400 NW 6 Fort Lauderdale, FL 33309

tayers@broward.edu

Thomas Dawkins

Microsoft Corporation  
One Microsoft Way  
Redmond, WA 98052

thomas.dawkins@microsoft.com

James Risler

Cisco Corporation  
170 West Tasman Drive  
San Jose, CA 95134

jarisler@cisco.com

Industry Representative

TBA  
2nd line of address

1st author's E-mail address

**ABSTRACT**

There is a severe shortage of IT workers, and when you think about the tech skills that are most in demand, you most likely imagine things like cybersecurity, cloud, and data science. All fields ripe with Industry Certifications to validate one’s expertise. As technology companies are engaged in a fierce fight for talent, educational providers are working hard to produce qualified individuals with the skills and abilities necessary to fill the open positions. The panelists will discuss their perspective on the value of Industry Certifications in Information Technology Education.

# INTRODUCTION

There is currently a severe worker shortage in the US due to a variety of reasons (including the skills gap, large numbers of retirements, a declining labor force, and changes in the types of jobs that are available in today’s economy). Companies that depend on workers with information technology skills are particularly affected by the shortages. The dramatic increase in the use of computing devices and other technologies in today’s workforce has greatly increased the need for workers in this sector.

Furthermore, information technology includes many specialty areas that demand workers with increased or specialized skills. Recently, Burning Glass Technologies reported that there were over 300,000 job openings for cyber security positions in the last 12 months. According to a 2017 report from the Departments of Commerce and Homeland Security, that number will grow to 1.8 million by 2022.

Enter the ongoing debate—do I need certifications or degrees to begin or advance in my career? Employers, seeking relief from the shortage, look to educational institutions for graduates with the knowledge, skills and abilities necessary to fill the open positions. Many high skill jobs require four year, or even more advanced degrees to qualify. Other positions are available to middle skills workers who have obtained 2-year degrees, specialized training or certification credentials that attest to their skills.

According to a 2017 study by the Lumina Foundation, industry and professional certifications across more than 16   
  
different industry sectors are being embedded in diverse kinds and levels of educational credential programs − from bachelor’s degree   
  
to dual-enrollment high school-community college programs. Key findings from the study include:

* The practice is especially prevalent in credit-bearing certificate and associate and applied associate degree programs in community and technical colleges; and in credit-bearing and non-credit certificate programs in four-year institutions.
* While the main impetus for embedding certifications in higher education is to enable educational institutions to respond to employer demands, funding, and policy (grant requirements, federal and state policies) are also important drivers of this practice.
* Respondents from community and technical colleges and employer associations consider embedding industry certifications to be especially relevant to their programs and partnerships. Four-year institutions are less likely to see the practice as relevant.
* There is considerable variation in what educators mean when they say they embed credentials in their programs of study. For example, embedded certifications are being delivered as both a required and an optional component of college courses. Passing the certification exam may be a requirement of the course of study or as one of many assessments in the course. In other cases, the exam may be used as the capstone assessment of the course, with passage required for attainment of the credential.

They also report that the top three benefits to embedding industry and professional certifications in higher education are 1) students can complete both academic credential and industry/professional-recognized certification, 2) helps keep college/ university curriculum up-to-date with industry standards, and 3) employers get students trained to their specifications or their various tools.

Join us to discuss this important issue from an academic, industry, and certification provider perspective.

# REFERENCES

1. Fisher, A. 2016. *The biggest IT skills shortage you (probably) haven't heard about*. Fortune. <http://fortune.com/2016/03/29/sales-it-skills-shortage/>
2. Ganzglass, E., Porter, K., and Zanville, H. 2017. Report on phase I study: Embedding industry and professional certifications within higher education. *Lumina Foundation, Connecting Credentials.*
3. Burning Glass Technologies. 2018. Cyberseek figures show U.S. still struggles with cybersecurity skills gap. <https://www.burning-glass.com/blog/cyberseek-figures-show-u-s-still-struggles-with-cybersecurity-skills-gap/>