

FOREWORD

Education can be an end in itself. Knowledge, culture, civic engagement, and personal growth are all valuable outcomes. But for most learners and their families, education is also a means to an end—greater professional, personal, and economic opportunity. Typically, a person’s first job will build on knowledge and skills gained in college while also requiring new knowledge and skill development. Those capabilities, in turn, will lead to the next opportunity.

Higher education plays a crucial role in this process, contributing to an ever-evolving continuum of people, skills, problems to be solved, interactions, and ongoing learning. Sean Gallagher’s important new book focuses on a crucial part of this continuum: the rapidly evolving intersection of higher education and hiring. As Gallagher notes, while the degree and a transcript have long been the gold standard in college and university credentialing—and the best insurance for a good job and growing wages—new options are emerging. Gallagher provides a fascinating and indispensable guide to that evolving sector.

One of the critical catalysts for change in the economy, the labor market, and higher education has been information technology (IT). Recall *The World Is Flat?* IT enabled globalization. Boundaries have become more porous; financial transactions and communication instantaneous; and traditional notions of speed and scale were up-ended. And although e-mail, online learning, and social media have not replaced campuses, courses, or faculty, these IT innovations have challenged our assumptions about information, hierarchies, and empowerment. Without a doubt, IT has changed work and the labor

market. Routine jobs have been automated; robots and algorithms have displaced workers. While even highly skilled jobs can be displaced by advanced computational power, growth of the hybrid job market (which includes positions that blend two or more skills such as analytics and marketing) is explosive.

As the world has changed around us, our notions of what it means to be educated have evolved as well. Intellectual skills are a must in today's world, but so too are interpersonal skills. A complex world requires complex skills. Historically a college degree was the best proxy for those complex skills. But today's jobs require the meshing of multiple disciplines and skills, with frequent upskilling. Organizations are less hierarchical, with the need for rapid forming, and dissolving, of distributed teams. Fluidity rather than stability characterizes the environment. Employers find little time to grow talent—they need to hire the right match of skills, competencies, and attitudes to remain competitive. Because an organization's success depends on its people, the stakes are high for employers to find the right match in job prospects. Increasingly they are adopting sophisticated tools such as predictive analytics to improve their selections based on competency matching and quality of hire analysis. And as we achieve greater clarity between business needs and workforce capabilities, our notions of competencies and credentialing shift.

In this environment, it is not surprising that educational options have also grown. Competencies, certificates, boot camps, and badges augment traditional options. Do-it-yourself learning opportunities are readily available (for instance, Google, Khan Academy, Lynda.com), making it more convenient to keep up with rapid skill changes. Both within and outside of higher education, guidance is available for those seeking additional skills. Stackable credentials, degree pathways, course selection tools, and new services such as Training Finder seek to offer learners more certain pathways to credentials and opportunities.

Verifiable credentials have value in the marketplace. Competencies, certificates, diplomas, and informal learning are being integrated

into digital identities. Online talent platforms, such as LinkedIn, can scan these credentials and match candidates with employers, as well as provide feedback to institutions on their alumni and educational programs. Online talent platforms are becoming the “operating system” of this interconnected ecology.

Common competencies (such as problem solving) may be critical in multiple industries (for example, health care, IT, advanced manufacturing, and so on). These competencies form the basis of the many “stackable” and flexible job pathways. As common terminology and taxonomies emerge, a new language is being developed that will speed the adoption and use of competencies. Employers, students, and educators are interested in a transparent system that allows each to understand the competencies needed, how they are assessed, and a marketplace that enables multiple paths to career success.

In some ways, much of this is not new. Communication skills, problem solving, and critical thinking have long been goals of education. Employers have not been oblivious to their desirability, either. For example, competency-based education has been available for decades, and many colleges and universities offer hundreds of credentials. Two shifts are significant, however. One is the economic implication of a strong link between hiring and higher education. The other is a market dynamic.

The wage premium of a college education has been persistent and significant, even as the number of college graduates has grown. However, there is increasing skepticism about the cost and value of a college education in light of reports of unemployment, underemployment, and high student loan debt. At the same time, employers are finding it difficult to pinpoint the employees they need, hampering their growth and profitability, which in turn impacts individual wages, tax receipts, and community vitality.

Markets need information to work. One significant impact of IT is the sharing of information. Access to information, whether about the price of steel or the likely salary in marketing versus medicine, affects behavior. Clearly business, industry, and the workplace are markets.

But increasingly, higher education is perceived as a market; the currency might be applicants, graduates, or those deemed most likely to succeed. Job seekers, including those with college credentials, are in a marketplace that seeks to match talent with opportunities.

In a world needing complex skills that are rapidly changing and an economy closely linked to innovation and services, education is an imperative. Credentials signal education and skills. And the emerging digital credentialing ecosystem provides an increasingly better opportunity to align pathways, needs, and skills. This ecosystem is just forming. Colleges and universities, employers, and job seekers are part of this complex system, along with governments, venture capital investors, and foundations. By focusing on the intersection of higher education and hiring—an area of great importance and rapidly accelerating change—Sean Gallagher’s book is timely, insightful, and an important addition to the literature.

We cannot afford a one-sided dialogue about education or the workplace. This book brings into clear and compelling focus the limits of how our system works today, how it has evolved in recent years, and how we might do better tomorrow. It should be used as both a guide to our current situation and as a catalyst for a broader and richer conversation about education and employment, individuals and communities, and both the public and private good of education. Our future depends on it.

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