



## **Skills-based Education: Shifting the Focus of Higher Education**

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## **Abstract**

Skill development has become a crucial element for the health of the job market post-COVID-19. Both employees and employers share the need for skill development. This context emphasizes the necessity for education that is skills-based, prompting the need for educational institutions to adjust accordingly. To remain relevant, higher education institutions should shift their curricula to include skills that are required by both employers and students, bridging the gap between institutions and the industry. This paper reviews the current state of skill development for American workers and employers based on the Career Optimism Index. It shares some approaches to bridge the gap between universities and industry and discusses Simultaneous Constructive Alignment as a practical framework to revise universities' curricula to become more aligned with the required industry and students' skills.

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## **Introduction**

In recent years, there has been a growing focus on the development of American workers' skills. The COVID-19 pandemic has deeply influenced the job market and has changed American workers' perspectives and needs toward their careers. Several studies have been conducted since 2020 to capture American employers' and workers' professional statuses and needs at the University of Phoenix. The Career Optimism Index® is generated each year to measure how optimistic people feel about their careers. For the 2023 Career Optimism Index®, a total of 5,000 US workers and 500 employers participated in a 20-minute online survey from December 9, 2022, to Jan 13, 2023 (Career Optimism Index, 2023). The results indicate that career challenges have continued to deepen and cause financial stress and mental burnout. However, American workers remain optimistic about their future careers, and skill development is the key issue that raises their career optimism.

While a college degree is still valuable, there is a growing focus on the topic of skills versus degrees, and experts agree that job skills are becoming increasingly crucial in the current job market. The World Economic Forum predicts that by 2030, over 1 billion jobs, almost one-third of all jobs globally, will require additional or new skills (World Economic Forum, 2020). This has led to a trend toward skills-based education and hiring.

The 2023 Career Optimism Index helps us better understand how deeply skill development influences the job market. Higher education institutions may use the current skill development needs to become more relevant and meet students' and employers' expectations. To stay relevant, higher education institutions should shift their curricula toward including skills required by employers and students and bridge the gap between institutions and industry. In this paper, we review the current state of skill development for American workers and employers,

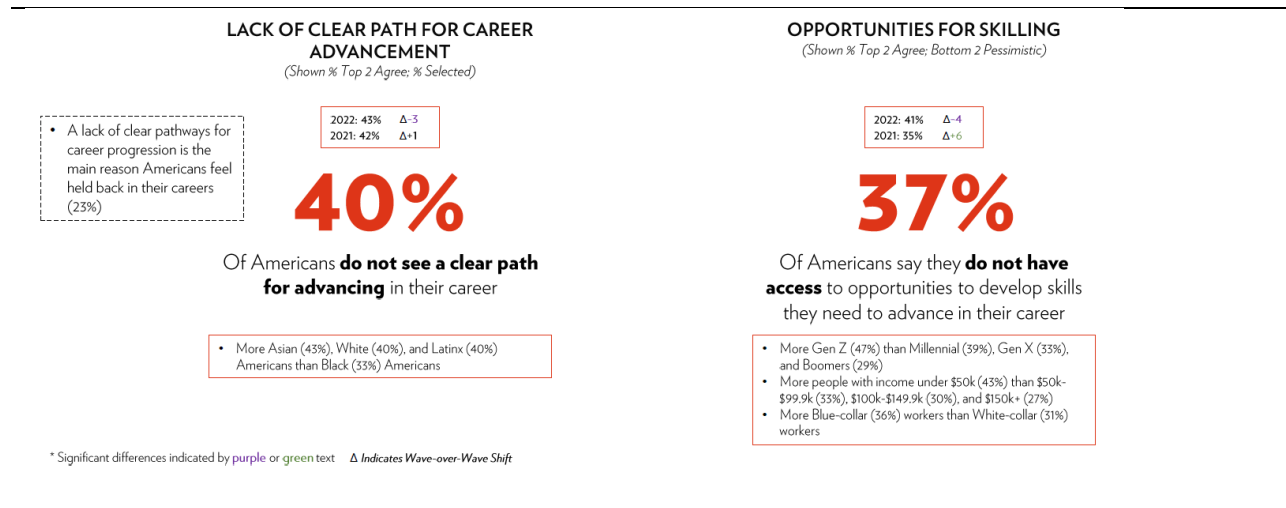
share some approaches to bridge the gap between universities and industry, and discuss a practical framework to revise universities' curricula to become more aligned with required industry and students' skills.

### Need for Skill Development

According to the 2023 Career Optimism Index (2023), both workers and employers share the need for skill development. About 37% of Americans reported that they don't have access to skill development opportunities to advance their career as shown in Figure 1. Lack of access to skill development is referred to as the main barrier to their career advancement.

**Figure 1**

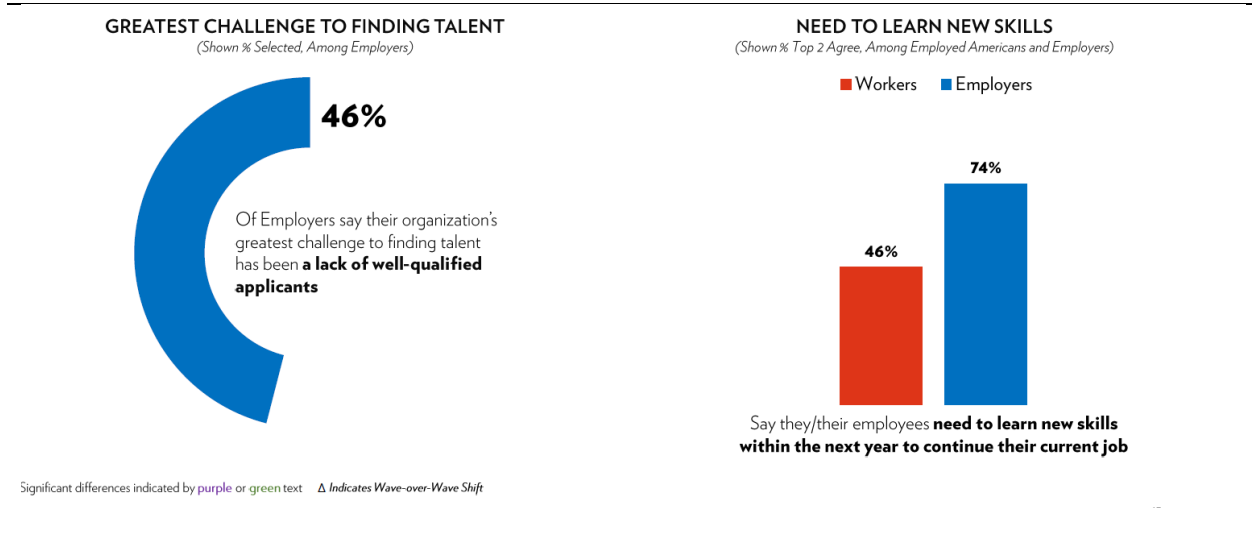
#### *Skill Development and Career Advancement*



Additionally, 46% of American employers refer to a lack of well-qualified applications as the greatest challenge for hiring workers. Also, 47% of employers shared that their employees need to learn new skills to continue their job as shown in Figure 2.

**Figure 2**

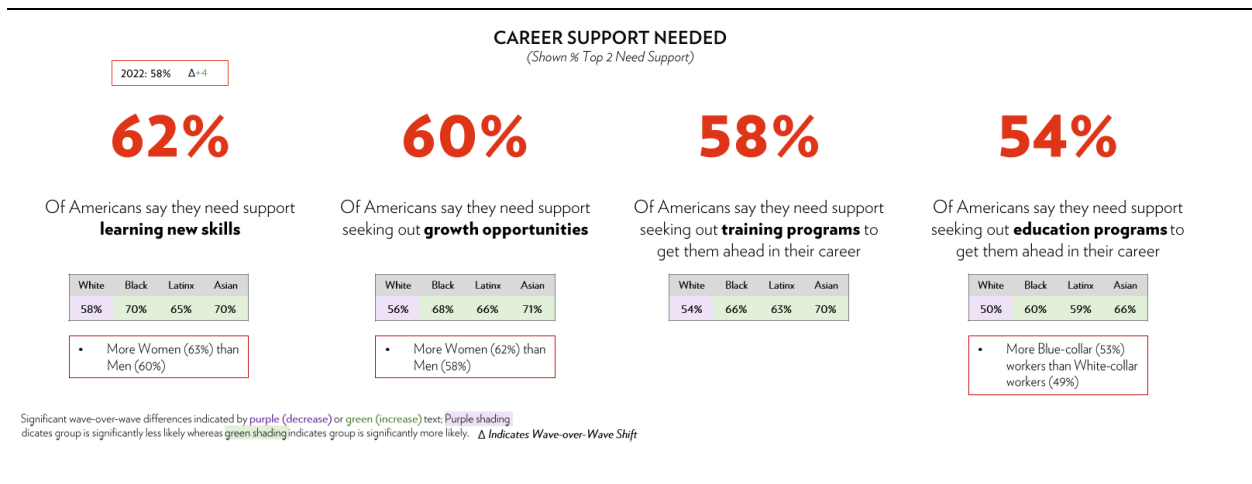
*Skill development is the employers' greatest challenge*



Most workers need support for learning new skills while the need is higher among multicultural groups and women. About 60% of men and 65% of women need to learn new skills. While 58% need to seek out training programs and 54% educational programs to advance their career as shown in Figure 3.

**Figure 3**

*Need to learn new skills*

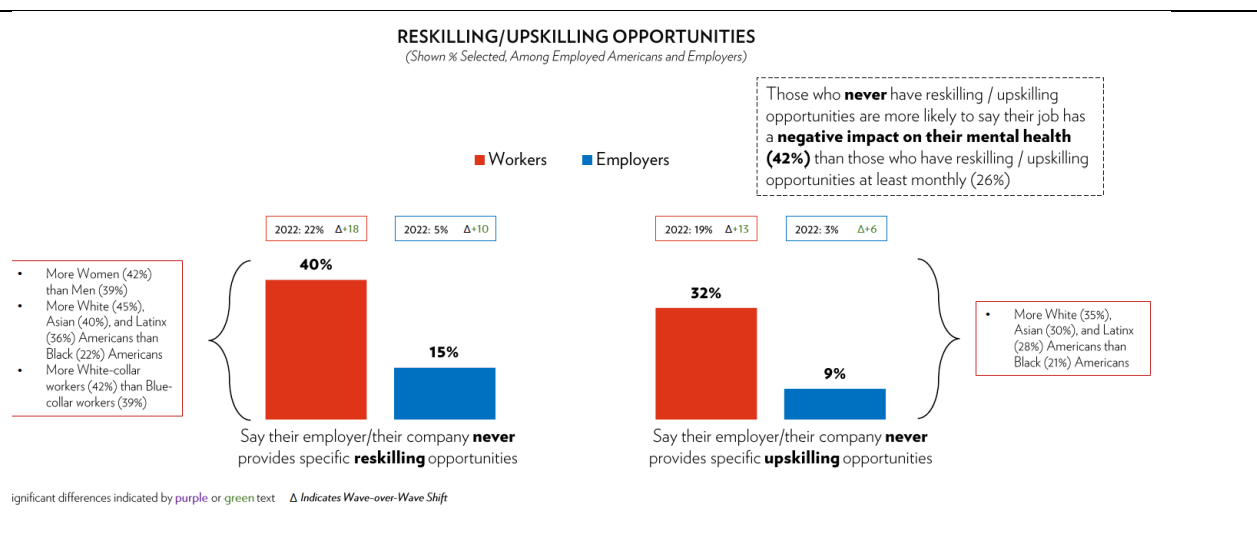


## The Disparity Between Employers' and Workers' Perceptions

Interestingly, employers and workers have different perceptions of skill development opportunities (Career Optimism Index, 2023). About 40% of workers reported that their employers never provide reskilling opportunities while 15% of employers share a similar perspective. Furthermore, 32% of workers believed their employers never provide upskilling opportunities while just 9% of employers agreed as shown in Figure 4.

**Figure 4**

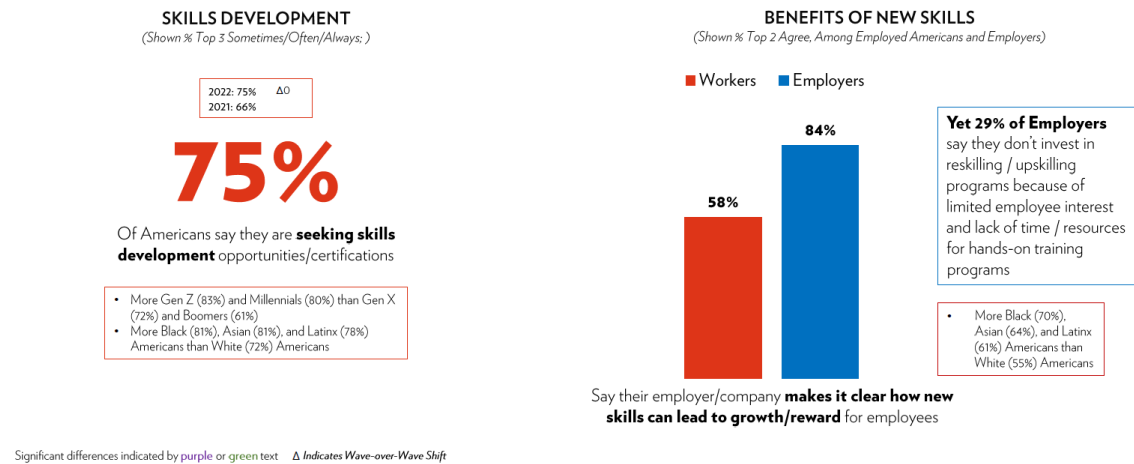
### *Reskilling and Upskilling Views*



Most American workers, 75%, reported that they seek skill development opportunities or certificates. However, there is a disparity in the perception of employers and workers about communicating the role of new skill development in career advancement. About 84% of employers believed they made it clear how new skills can lead to the workers' professional growth, while 58% agreed as shown in Figure 5.

## Figure 5

### Importance of Skill Development



## Opportunity for Higher Education Institutions

Higher education Institutions can tap into the current context to better serve workers' desire to be challenged to learn new skills and employers' need to hire more skillful workers. Shifting to a skill-based curriculum can enhance the usefulness of the degrees awarded by higher education institutions. It seems that educators, students, and employers need to collaborate to revise universities' curricula to align them with the industry's needs. However, revising the curricula to enhance graduate students' employability is very complex (Keiper et al., 2019).

A review of recent studies revealed a few approaches to be implemented to further align degrees with skills desired by employees and employers. The multiple-tier co-up model proposes that employers select students as early as high school so that they can learn the skills required by their employers as they attend their educational programs (Hoanca & Craig, 2019). The product-based learning approach supports the alignment of competencies with relevant industries



(Hidayat, 2015; Yudiono et al., 2021). The importance of performance analysis of graduates was suggested to identify graduate skill gaps related to industries (Febriani et al., 2021). Artificial Intelligence can help bridge the gap between university teaching and industry-required skills as suggested by some recent studies (Bakkar & Axmann, 2022; Bigan, 2022). Most importantly, Simultaneous Constructive Alignment offers a framework for higher education institutions to revise their curricula and include skills based on students' and employers' needs (Vitale et al., 2020). Having a practical framework is essential to shift the higher education institution curricula to skill-based- education.

### **Simultaneous Constructive Alignment (SCA): A Framework for Remaining Relevant**

The SCA provides a framework for revising curricula at higher education institutions to bridge the gap between students' and employers' needs (Vitale et al., 2020). The goal is to enhance the graduate students' employability skills. The SCA framework is the extension of the traditional Constructive Alignment model developed by Biggs (1996, 2007). Constructive Alignment is an approach that recommends focusing on aligning teaching and assessment to the intended learning outcomes. In a constructive approach, students construct knowledge through what they do during their courses. These outcomes should be assessable. Teaching should include learning activities, expressed as verbs, that help students achieve the intended outcomes.

The main idea of the SCA framework is to make the learning outcomes explicitly developed to simultaneously meet the expectations of students, employers, and academics. This way the awarded degrees are more likely to enhance students' skills and employability. The learning outcomes drive the SCA framework.

The design process includes the following steps as shown in Figure 6:

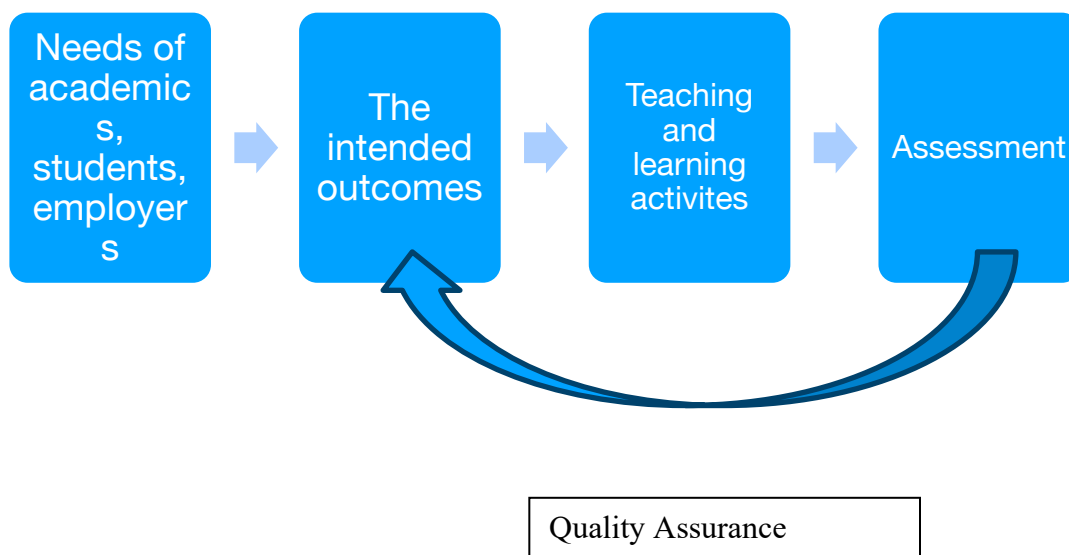
- The learning outcomes are developed based on students, academics, and employers' needs and expectations.
- Learning activities are developed based on the intended learning outcomes to support students in doing or achieving those outcomes.
- Assessments are developed and evaluate how much the learning outcomes are achieved by students.
- Quality assurance as feedback to the process should be developed to ensure students achieve the intended outcome and students, academics, and employers are satisfied with outcomes.

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**Figure 6**

*Simultaneous Constructive Alignment Framework*

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### **Conclusion**

In the post-COVID-19 job market, skill development has become a crucial element for both workers and employers. According to the Career Optimism Index of 2023, workers often

view the lack of access to skill development as a major obstacle to career advancement, while employers recognize the need for their employees to learn new skills to maintain their jobs. However, there is a shortage of adequate training programs to address these needs. Many higher education institution graduates do not possess the industry-specific skills required for employment, which highlights the need for educational institutions to revise their curricula and incorporate these industry-specific skills. Nevertheless, revising curricula to include these skills can be an overwhelming process that requires established procedures.

A review of the literature has identified various methods that researchers use to bridge the gap between academia and industry. These include the multiple-tier co-op model (Hoanca & Craig, 2019), the product-based approach (Hidayat, 2015; Yudiono et al., 2021), performance analysis of graduates to identify their skill gaps (Febriani et al., 2021), and the use of artificial intelligence (Bakkar & Axmann, 2022; Bigan, 2022). To better incorporate skill-based education into their curricula, higher education institutions should use the Simultaneous Constructive Alignment framework (Vitale et al., 2020). This framework suggests that curricula should be developed based on students, academic needs, and employer expectations. To remain relevant and meet society's needs, higher educational institutions must collaborate with employers and students to revise curricula and bridge the gap between academia and industry.

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