

National Occupational Frameworks Success Stories

Accelerating Apprenticeship Program Development

A National Occupational Framework provides the blueprint for building a high-quality Registered Apprenticeship Program for a specific occupation. Organizations can use the frameworks to accelerate the design of apprenticeships because they are thoroughly researched and reviewed by industry experts and approved by the US Department of Labor. Each framework contains an overview of the occupation, a list of competencies that apprentices will learn on the job, and an outline of the recommended coursework apprentices will take through related instruction.

All organizations in the US apprenticeship system can benefit from using National Occupational Frameworks to explore, develop, launch, and update Registered Apprenticeship Programs. This set of testimonials shares how three organizations—an employer, an industry association, and a State Apprenticeship Agency—have used the frameworks to advance their apprenticeship efforts.

Visit apprenticeships.urban.org to learn more about the National Occupational Frameworks.



EMPLOYERS:

Fast-Tracking the Design of Apprenticeship Programs

Employers can use National Occupational Frameworks as roadmaps for developing Registered Apprenticeship Programs. Each framework includes an outline of skills and competencies for an occupation thoroughly reviewed and agreed to by industry experts. Employers can design classroom-based instruction and on-the-job learning to align with those skills and competencies. Rather than starting from scratch to develop a program, frameworks help employers fast-track the design of high-quality apprenticeships.

Cloud for Good is a national cloud consulting firm that launched a database administrator apprenticeship program in 2022 with support from the Urban Institute. As demand for its services increased, the company needed to grow its entry-level workforce. Cloud for Good's previous approach was to only hire certified employees with several years of consulting experience, but the firm was unsure how to recruit and train individuals without technical certifications

and work experience. The database administrator National Occupational Framework provided a starting point for the company to develop a two-year apprenticeship program for entry-level database analysts. Since launching the program, Cloud for Good has hired more than 35 apprentices and graduates have launched successful careers in cloud technology consulting.

The National Occupational Framework provided Cloud for Good an industry-vetted blueprint for developing an apprenticeship. Because the database administrator framework was thoroughly vetted by tech industry professionals, Cloud for Good found that the skills and competencies aligned with the technical needs of the role. The company only needed to adjust the skills and competencies to reflect specifics of the Salesforce database and add consulting competencies. The result is an apprenticeship program that fully prepares employees to work independently as Salesforce consultants. Apprentices start with eight weeks of training and earn relevant certifications. Then, they learn on the job by working on client projects with mentoring from experienced Cloud for Good consultants and project teams.

Using the framework enabled Cloud for Good to design a structured, comprehensive Registered Apprenticeship Program to recruit and train entry-level tech workers. The program has helped the company grow and meet increasing service demand. With over two years of running the apprenticeship program, Cloud for Good has proved the quality of the database administrator framework, finding that program completers are equally as qualified as individuals hired with prior experience as database consultants.

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The benefit of using the National Occupational Framework was that it enabled us to design the training, on-the-job learning, assessments, and certification to ensure that by the end of their two years, apprentices were fully equipped. The framework gave us the roadmap.

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Lindsey Ciochina,
chief financial and administrative officer,
Cloud for Good



INDUSTRY ASSOCIATIONS:

Meeting Industry Workforce Needs through Apprenticeship

One role of industry associations is to bring employers together to discuss shared workforce challenges and develop industry-wide solutions. Many industries are exploring Registered Apprenticeship Programs as a proven approach to talent development. National Occupational Frameworks allow industry associations to shape the education and training of future employees in the field and develop structured programs that create strong talent pipelines in their industry.

The Association for Professionals in Infection Control and Epidemiology (APIC) is the professional association for infection preventionists (IPs) and represents over 15,000 members. In 2023, APIC identified several workforce

challenges facing the profession: a critical shortage of IPs at health care facilities across the country, a lack of clear academic pathways into the IP occupation, limited awareness of the occupation among current and potential

health care workers, and a need to increase diversity among IP professionals. APIC determined that Registered Apprenticeship Programs could effectively address many of these challenges and strengthen the IP talent pipeline.

APIC developed a National Occupational Framework for the IP occupation as a tool to simplify the process of designing IP apprenticeships. APIC recognized that it could provide valuable support to the industry by defining the components of a Registered Apprenticeship Program, and a National Occupational Framework provided an easy-to-follow format for sharing the skills and competencies needed by IP professionals. APIC had previously developed an IP competency model and curriculum for an academic pathway into the profession and used these as the starting point for the National Occupational Framework. APIC and the Urban Institute worked with IP experts to create the apprenticeship curriculum, including related technical instruction, on-the-job learning, and mentorship options for apprentices.

Developing a National Occupational Framework in collaboration with the Urban Institute demystified the process of designing and registering apprenticeship programs. This effort also enabled APIC to fully understand the registered apprenticeship model and how the framework could support the health care industry in creating IP apprenticeship programs. APIC is now using the National

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The value of the National Occupational Framework to our association was clear because it saved us time and provided invaluable guidance every step of the way.

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Monica Alexander,
associate director for regulatory affairs,
Association for Professionals in Infection
Control and Epidemiology

Occupational Framework to work with health care organizations to develop and register IP apprenticeship programs in multiple states.



STATE APPRENTICESHIP AGENCIES:

Expanding Capacity of the Apprenticeship System

State Apprenticeship Agencies (SAAs) play a critical role in the US apprenticeship system and work directly with businesses and other organizations to explore, design, register, launch, and sustain apprenticeship programs. SAAs can use National Occupational Frameworks to move employers from concept to program completion more quickly and accelerate the growth of Registered Apprenticeship Programs.

As an SAA, the Alabama Office of Apprenticeship (AoA) is responsible for the promotion, quality, and compliance of Registered Apprenticeship Programs in the state. AoA's mission is to expand registered apprenticeships and all

forms of work-based learning to provide high-quality career training that enables workers and employers to prosper in pursuit of the continued economic development of the state.

AoA uses the National Occupational Frameworks with employers to accelerate the development of new Registered Apprenticeship Programs. The list of skills and competencies for the occupation is one of the most helpful parts of the framework for AoA staff. They use the list of skills and competencies as the beginning point in the apprenticeship design process to avoid starting from scratch with an employer to identify the skills and competencies for the job. AoA staff also use the related instruction description to identify potential coursework for apprentices, particularly with employers who want to provide the instruction in-house.

AoA feels confident using the National Occupational Frameworks with employers because they are high-quality and developed with extensive input from industry experts. Since it is not feasible for AoA staff to be experts in every industry sector, the frameworks provide useful foundational information on occupations. In addition, the frameworks support AoA's "high-touch" technical assistance approach to working closely with employers to develop programs. Staff use the frameworks to provide a program outline to employers to react to and identify any adjustments needed to customize the apprenticeship to meet their workforce needs. Overall, the frameworks save AoA staff and employers time and help create programs more quickly by streamlining the development and registration process.

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I always recommend the use of the National Occupational Frameworks for my peers in other states who are working to create registered apprenticeship programs because the frameworks bring certainty, simplicity, and speed to the table, which is very appealing to employers.

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Josh Laney, director,
Alabama Office of Apprenticeship

Access the National Occupational Frameworks at apprenticeships.urban.org.

Frameworks are available for occupations in a wide range of industries:

- Advanced Manufacturing
- Education
- Energy and Climate
- Finance and Insurance
- Health Care
- Information Technology
- Professional Services
- Public Sector
- Transportation and Logistics

The National Occupational Frameworks are developed through the Urban Institute's [Registered Apprenticeship Occupations and Standards Center of Excellence](#).

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