

# The DACUM Virtual Institute: A Case Study in Designing for Adult Learners

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## **EXECUTIVE SUMMARY**

*When the domestic and international travel restrictions resulting from the COVID-19 pandemic made face-to-face training and professional development activities impossible, organizations needed to shift rapidly to a virtual format. One such organization, the DACUM International Training Center at The Ohio State University's Center on Education and Training for Employment, was forced to reimagine its five-day, in-person DACUM Institute—a workshop with a 35-year history of training human resources and learning and development professionals in the DACUM method of job analysis. This chapter examines the opportunities presented by and the challenges inherent in deconstructing this face-to-face experience and reimagining it as a virtual one, the DACUM Virtual Institute. This online program, a mix of synchronous and asynchronous learning activities, puts into practice learning design methodologies and learner experience design principles to capture the essential components of the in-person workshop experience while also leveraging new opportunities afforded by virtual and online learning.*

## **BACKGROUND**

The DACUM International Training Center is part of the Center on Education and Training for Employment (CETE) at The Ohio State University. In the past 35 years, the center has conducted more than 2,500 2-day DACUM job-analysis workshops and delivered 415 Training Institutes in the United

States and abroad. The DACUM Training Center’s clients include higher education, private industry, and government agencies (Center on Education and Training for Employment, 2021).

DACUM, short for Developing a Curriculum, is a method of job and occupational analysis that stands apart from the many job analysis techniques that rely on questionnaires, observations, and interviews and, as a result, can be time-consuming, expensive, or overly reliant on indirect sources of information (Brannick et al., 2007). Instead, the practices that make up the DACUM methodology quickly and efficiently leverage the *direct input* of expert workers. The resulting products from this analysis include “a graphic portrayal of the duties and tasks” that make up the job or occupation being examined (Heimlich et al., 2021, p. 30). These products can be used to develop or revise training and curricular programs that distinguish competency-based instruction from traditional job training.

At the core of the DACUM process is the reliance on a panel of expert workers in a job or occupational field to define and describe their work, ultimately identifying the discrete duties and tasks performed on the job through a highly engaging facilitated process, led by a facilitator trained in the methodology. These expert workers, often referred to as *subject-matter experts* or “SMEs,” identify the duties or central units of work performed by employees in the role. Each duty comprises several tasks dependent on specific skills and knowledge, performed with specific tools and equipment, and measured with recognizable metrics that can be used to detect common errors or successful completion of the task (Heimlich et al., 2021).

The DACUM methodology is based on three logical premises: (1) More than anyone else, expert workers are capable of describing their jobs, identifying the primary duties that make up the day-to-day work of those jobs, and articulating the knowledge, tools, and skills necessary for exemplary completion of said duties; (2) a job can be defined and understood through an examination of the duties (and component tasks) performed by expert workers; and (3) all job tasks are enabled by the worker’s behaviors, use of knowledge and skills, and specific tools and equipment (Norton, 1997; Norton & Moser, 2008). Based on these assumptions, DACUM “provides information about theoretical knowledge, practical skills, and personal attitudes or dispositions needed to equip a person to perform at a particular level” (Dixon et al., 2019, p. 18), which is what makes it such an effective tool in job and occupational analysis.

DACUM is used in a wide variety of contexts, including management decision-making; licensure and certification; assessment and test development; human-resources processes and organizational development; or career advising and counseling (Center on Education and Training for Employment, 2021; Norton & Moser, 2008). Further, in addition to jobs or occupations, the DACUM methodology can be applied to analyze the following:

- **Functions:** when several individuals perform an important function as part of their jobs.
- **Conceptual jobs/occupations:** when an organization wants to develop a new training program or position, relying on the DACUM methodology to identify the work associated with emerging industries.
- **Processes:** to determine the work required to complete a given process involving workers with different job titles.

Heimlich et al. (2021) used the findings of a DACUM workshop to look “across the competency profiles... to see trajectories of competencies that are present, but change over career states... [revealing] pathways of different roles in the same area of work” (p. 33). In this way, the results of a DACUM analysis can be used to identify broad “domains” of the work done by various roles within an institution

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