



Belk Center  
for Community College  
Leadership and Research



# 2020 Postsecondary Career and Technical Education Research Fellow

Sponsored by the ECMC Foundation

## Forest Olaf Peterson

Dissertation Research Fellow, Stanford University

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Bio. Forest O. Peterson brings both blue-collar and white-collar perspectives to his role as a scholar of infrastructure. For seven years, he was a concrete laborer on large infrastructure projects. Those years taught him social and environmental dimensions from the ground up. Forest's fellow laborers wanted to build highways safely. However, though skilled, they often did not have the information to succeed, for example, they did not have access to a task schedule to see they could have worked on another task to allow repairing a broken piece of equipment. Following his years as a laborer, Forest was a field engineer on a three-mile concrete rail corridor. Learning from his experiences, he equitably shared information with field crews. However, he observed a fundamental limit in workforce communication. This became his topic as a doctoral researcher at Stanford. There, he found a darker sociotechnical rationale for controlling information. Gatekeeping of information allowed profiting to subvert the safety of the workforce, the environment, and the community. For example, nobody provided a crew of a hundred migrant workers the information that would show their worksite was contaminated with a powerful neurotoxin. From these experiences, Forest is convinced that workforce technical education and with it, access to information and discretion is an important domain to develop novel methods.

Project. In the past few years, a paradigm shift has introduced data and technology into the workforce domain. These data allow for collaboration and participation of the workforce in methods previously off-limits, such as design and planning, which introduces social mobility of the workforce with new concepts such as virtual design and construction with goals of sustainability, social consciousness, and energy-efficiency. There is now a need to integrate these methods into the workforce curriculum so as to produce a technically skilled workforce.



Research Sponsor: Martin A. Fischer, Ph.D.  
Kumagai Professor of Engineering and Professor of Civil and Environmental Engineering  
Director, Center for Integrated Facility Engineering (CIFE)  
Stanford University

## The Program

Fellows will be part of a community that participates in two national research training institutes, research methods webinars, works with CTE research mentors, and conducts postsecondary CTE research.

"We have designed this CTE Fellows program to provide scholars with the unique opportunity to be part of a community and a formal curriculum to develop their research skills while working toward improving the field of CTE."

— James Bartlett II, Ph.D.

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