

Gaps in Understanding the Professional Development Needs of Post-Secondary CTE Educators: Universal Design for Learning (UDL) as a Viable Solution

Executive Summary

This white paper argues that targeted professional development (PD) is crucial for improving postsecondary Career and Technical Education (CTE) outcomes. Specifically, it advocates for Universal Design for Learning (UDL) as a powerful framework to enhance teacher self-efficacy and, consequently, student success. The paper identifies and offers solutions for gaps in existing CTE PD, especially concerning the needs of career-changing instructors and the increasingly diverse student population. It proposes UDL-based PD modules as a viable solution.



[Read the Full Whitepaper](#)

Key Themes & Ideas

The Importance of CTE and the Changing Landscape:

- CTE is vital for addressing the demand for middle-skill jobs.
- The student population in postsecondary CTE is increasingly variable.

The Challenge of CTE Teacher Preparedness:

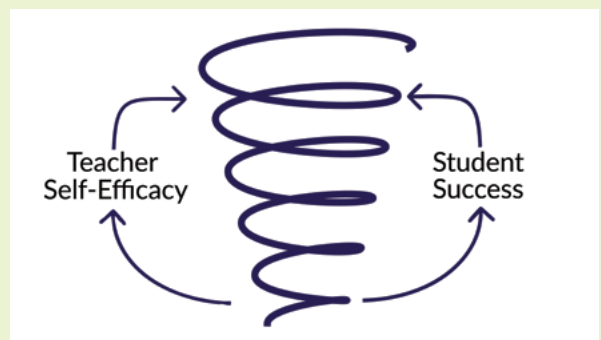
- Many CTE teachers are career changers who may lack formal pedagogical training.
- CTE teachers need both trade skills and pedagogical skills.

Teacher Self-Efficacy as a Critical Factor:

- Teacher self-efficacy is crucial for positive classroom outcomes and is built through when teachers see the positive results of their thoughtfully designed learning activities.
- Teachers' growth in self-efficacy can be viewed as a "spiral" where teacher beliefs lead to student success, which in turn reinforces teacher beliefs.

Teacher Self-Efficacy Spiral:

Belief in one's ability to positively impact learning grows as students are successful.



Professional Development can be a Driver of Teacher Self-Efficacy:

- High-quality PD is identified as a key tool for building teacher capacity and self-efficacy.
- CTE educators frequently perceive much of the professional development they experience as irrelevant.

Universal Design for Learning as a Solution:

- UDL is an evidence-based framework for creating inclusive and effective learning environments for diverse learners and is applicable across all CTE content areas.
- Offering PD in UDL to postsecondary CTE instructors can accelerate and broaden the “self-efficacy spiral,” increasing teachers’ feelings of confidence and preparedness, as they see student success across the wide range of learners in their classrooms.

Recommendations:

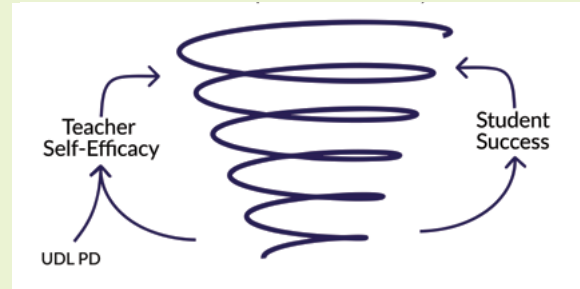
- Prioritize and promote UDL PD for post-secondary CTE educators.
- Provide targeted training in areas that post-secondary CTE instructors identify as areas of need, i.e., curriculum design, classroom management, special populations, and data usage.
- Conduct research to measure the effect of UDL-informed PD on student success.



Learn more about UDL at
bit.ly/UDL-Evidence

Teacher Self-Efficacy Spiral:

Professional development in UDL broadens and deepens teachers’ capacity and results in broader student success, which in turn improves teachers’ self-efficacy.



Michigan Use Case

The paper details a collaboration between CAST and Michigan’s Department of Labor and Economic Opportunity – Workforce Development Bureau (LEO-WD) to develop UDL-based PD courses for CTE instructors.

- Michigan faces workforce shortages in skilled trades, healthcare, manufacturing, and IT.
- CAST developed courses based on the needs of the field with direct input from postsecondary CTE educators. These included:
 - Creating an engaging CTE classroom for all
 - Supporting executive functioning in CTE
 - Assessment strategies for CTE educators
 - Strengthening CTE instruction with clear learning goals

Learn more about CAST in Michigan at
bit.ly/CAST-MI-CTE