

# Equity and Career and Technical Education

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Career and Technical Education (CTE) can be a gateway to achieving equity, but there are still gaps in opportunity that hinder pursuing this goal nationally and statewide. To support colleges' efforts to address these inequities the Office of Community College Research and Leadership (OCCRL) is conducting an exploratory case study of CTE programs that are making noticeable gains in supporting underrepresented and underserved students, as well as what structures and practices are implemented in order to strive for equity. This research brief helps set the foundation for this work by explores existing research literature to understand how equity in career and technical education is defined.

## What is Equity in Career and Technical Education?

The concept of equity is discussed often but rarely clearly defined in research as it relates to CTE. Through the online reference system EBSCO Information Services, I used the following search terms published in academic and practitioner journals between 1983 and 2017: "equity," "CTE," "career and technical education," "vocational education," "race," "gender," "career and technical education," and "vocational education." Of these results, only two (Chase, 2011; Welton & La Londe, 2013) explicitly operationalized the term "equity" even though the term was employed within the body of all but one article. When equity was a search term in relation to CTE or vocational education, the term was explicitly defined in one article as "a commitment to achieving parity in transfer and other educational outcomes across all ethnic groups" (Chase, 2011). However, virtually all of the articles discussed equity in relation to disaggregating data and providing supports or resources based on differences in the data.

The remaining articles most often showed some variation of addressing race or gender-based disparity in CTE or vocational education completion or employment rates (Bathmaker, 2017; Bragg, 2017; Campbell, 1986; Carnoy, 1994; Giani, 2017; Giani & Fox, 2016; Hamilton, Malin, & Hackmann, 2015; Lhamon & Uvin, 2016; Toglia, 2013). When I performed a search using "race" and "gender," in addition to CTE or vocational education, the term "equity" was used in five of the articles but not explicitly defined in any of them. Here, however, equity could be extracted based on inferential definitions of the terms "inequality" or "inequity" as underrepresentation or overrepresentation in CTE or vocational education courses or fields. The term "equity" was used most often in addition to "access" or "equality."

A third search, inspired by the prevalence of articles authored by scholars affiliated with OCCRL, produced three publications from the organization's website. Of the three pieces, a report citing Nieto & Boyd (2009), explicitly operationalized equity as "the process involved in achieving the ultimate goal of equality. Equity in education provides students with the varied, additional, or differentiated supports needed to achieve equality" (Welton & La Londe, 2013, p.6). They further defined equity gaps as "[differences] in results between various [categories] of students" (p. 14). One brief did not explicitly operationalize equity, but it could be inferred to mean "a reduction of bias" (Gioiosa, 2014), and a second brief focused on equity-minded responses to data revealing inequalities but did not explicitly define equity (Malin, Hamilton, & Hackmann, 2014). In all, eight of the twenty-four publications reviewed were written by OCCRL graduate research assistants or past or present faculty.

## How are We Studying Equity in Career and Technical Education?

Of the twenty-four total sources, nine of them were quantitative studies using large secondary data sources that looked for equity gaps in CTE education at the secondary or post-secondary level by race and/or gender (Campbell, 1986; Compton, et al, 2010; Eardley, Ellen, & Manvell, 2006; Giani, 2017; Hamilton, Malin, & Hackmann, 2015; Malin, Hamilton, & Hackmann, 2014; Oakes, 1983). Two of the sources were literature reviews. Ware and Stuck (2010) conducted a literature review that examined the ways in which research articles examining CTE education disaggregated data, and Rojewski (2013) explored





the ways in which scholars treated the social constructs of race and ethnicity in CTE scholarship. Seven sources were policy briefs, arguments, or reports that provided overviews of inequalities in CTE with regard to race and/or gender and made the case for disaggregation of data (Bragg, 2017; Chase, 2011; Toglia, 2013; Waid, 2004), and highlighted CTE institutions that find and address equity gaps (Bragg, 2017; Gioiosa, 2014; Lhamon & Uvin, 2016; Welton, 2014).

Lastly, two studies were comparative analyses. The first was a historical comparative analysis of Black and predominately white vocational education high schools in Chicago (Green, 1992), and the second observed equity happening in vocational education training in several countries (Carnoy, 1994). Of these, only one mixed-methods study investigated student, faculty, and staff CTE experiences via qualitative means (Giani & Fox, 2016).

## CTE Equity and Community Colleges

While many studies identify equity gaps and disparities in CTE education quantitatively, there is a dearth of qualitative research on the lived experiences of students matriculating into and through CTE at community colleges that have made headway in effectively conceptualizing equity and shrinking equity gaps. Further, more research is needed in this area as equity-minded faculty, administrators, and staff could provide much in the way of scalable interventions that other community college professionals could in turn implement on their own campuses.

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