Characteristics of Career and Technical Education Faculty across Institutions of Higher Education in the United States

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ABSTRACT

The purpose of this article was to examine faculty characteristics of CTE programs across the nation as well as identify the challenges and successes of implementing programs. Findings pointed to the overall decline of CTE full-time-equivalent faculty and the increase of adjunct faculty. In addition, findings demonstrated a lack of ethnic and racial diversity among faculty in CTE programs as compared to white faculty. Further, faculty reported declining student enrollment, budget cuts and decreases in funding, and lack of faculty are growing challenges for implementing effective programs. They identified career placement of graduates, high-quality students and graduates, and student enrollment increases as areas of success. The viability of CTE undergraduate and graduate programs as well as the field-at-large are dependent on the creativity, success, productivity, and problem-solving of faculty as well as their abilities to address and overcome these challenges.

KEYWORDS

Career and Technical Education, Diversity, Graduate Education, Undergraduate Education

INTRODUCTION

While literature in the field of career and technical education (CTE) is replete on issues related to high school students, undergraduate teacher education, and the professional development of teachers and administrators, studies on CTE faculty and teacher educators within institutions of higher education are nearly non-existent (Bartlett, 2002). The lack of research in this area is quite concerning given the need to expand the pipeline of CTE faculty charged with educating our future teachers, practitioners, and leaders in the field (Fletcher, Gordon, Asunda, & Zirkle, 2015). In the 2007 presidential address to the Association for Career and Technical Education Research (ACTER) Conference, Joerger (2008) warned:

Shifts in college and university CTE program foci, program downsizing and/or elimination, lack of properly supported graduate students and faculty, inadequate funding, diverging faculty/administrative professional roles and responsibilities, and the breadth of research foci continue to impact the scope and impact of CTE research (p. 69).

Substantiating Joerger’s claim, Fletcher et al. (2015) constructed a national database of CTE programs and distributed an online survey to their leadership (i.e., program coordinators, department chairs), and found a substantial decline in the number of CTE programs available between the years of 2001 to 2015. They found 236 higher education institutions offering 497 undergraduate and graduate CTE programs in 2015, while Bruening, Scanlon, Hodes, Dhitai, Shao, and Liu (2001) identified 385 universities and 673 CTE undergraduate teacher preparation programs in 2001.
Prior researchers have investigated the status of faculty in CTE programs across higher education institutions as well. Lynch (1990) conducted the first examination of the status of CTE faculty. He examined institutional (including public, independent, land-grant, church-related and other) and administrative data (program offerings, faculty, curricula, and instruction) regarding CTE undergraduate teacher preparation programs. He used two instruments (an Institutional Questionnaire and National Survey of Professors of Vocational Education) to collect data from 78 colleges and universities and 633 teacher educators. Lynch reported 420 colleges and universities in 50 states, as well as Puerto Rico, Guam, and Washington, DC, which housed vocational education programs. Lynch (1990) found that agricultural education programs had the largest number of full-time equivalent (FTE) faculty \( (M = 3.35) \) followed by technology education \( (M = 3.18) \). Lynch also found that 71\% of faculty were male and the average faculty member was 49 years of age. In regard to ethnic and racial background, 91\% of CTE faculty were white, 5.5\% Black, and 3.5\% other minorities. Over 68\% were tenured faculty and 84\% had a terminal degree.

Subsequently, Bruening et al. (2001) conducted a follow-up study to determine the characteristics of CTE teacher educators in terms of demographics, professional development activities, and instructional approaches they used in their programs. At that time, the profile of CTE teacher educators was 54\% male, 42.8\% were within the age interval of 51 to 60, 90\% were white, 4\% African American, and 3\% Hispanic. In terms of positions, 52\% were either associate or full professors, 25\% were assistant professors, 11\% were instructors, and 3\% were adjuncts. The researchers concluded that CTE teacher educators were demographically similar to the larger population of faculty in higher education. In addition, fewer CTE faculty had tenure and a doctorate, and an increasing number of faculty were being hired in non-tenure track positions.

However, a study examining the characteristics of CTE faculty has not been conducted for well over a decade (Fletcher et al., 2015; Fletcher & Gordon, 2017; Bruening et al., 2001). This issue is concerning given the substantially rising numbers of ethnically and racially diverse students at both the K-12 (Hoover & de Bettencour, 2017) and postsecondary levels (NCES, n.d.) – essentially creating a cultural mismatch (Achinstein, Ogawa, Sexton, & Freitas, 2010; Ingersoll & May, 2011; Stephens, Townsend, Markus, & Phillips, 2012; Villegas, 2010). With the substantial decline in CTE programs across the country, it is also necessary to understand the capacity of CTE programs to deliver instruction at the postsecondary level (Fletcher et al., 2015). Thus, there is a need to know the average number of faculty by rank and program area to ascertain the capacity of current CTE programs to meet the needs of their students. Further, knowing the successes and challenge of CTE programs would be helpful in determining future reform needed for sustainability and curriculum development. Successes and challenges of CTE programs could include issues related to advocacy, recruitment, curriculum relevancy, and sustainability.

**Purpose of the Study**

The purpose of this study was to examine faculty characteristics of CTE programs across the nation as well as identify challenges and successes of implementing programs. The research questions undergirding this study were:

1. What are the demographic characteristics of CTE faculty?
2. What is the average number of CTE faculty by rank based on institution type?
3. What is the average number of CTE faculty by program area based on institution type?
4. What is the average number of CTE faculty by ethnic and racial backgrounds based on institution type?
5. What are the reported successes and challenges of CTE programs?
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