

FUELING AMERICA'S WORK-FORCE BY EDUCATIONAL DESIGN

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EXECUTIVE SUMMARY

To compete economically on a global scale, a country must produce enough human capital to accommodate the workforce. As of 2021 and beyond, at least 71% of jobs in the United States will require some form of postsecondary credential in the form of either a college degree or an industry-recognized certification or licensure (Lindsay, J., Davis, E., Stephan, J., Bonsu, P., & Narlock, J. (2016). In comparison, as of 2021, approximately 48% of adults (24-65 years old) have acquired the postsecondary credentials appropriate, or required, for a high-demand, high-wage occupation. This shortage of skilled laborers perpetuates a challenge to maintain the United States' influence with international competitors. In addition, the disparity creates a challenge for domestic economic stability increasing the number of Americans living in poverty. This study examined the multi-faceted approaches that rural secondary schools in Kansas utilize to prepare students for postsecondary success through attaining degrees, licensures, or certifications to satisfy job qualifications.

INTRODUCTION

Education serves as the platform to provide the necessary skills and knowledge to ensure educators prepare enough skilled workers to fuel the workforce. Integrating Career and Technical Education (CTE) with academic preparation is integral to providing access to the skills and knowledge needed for specified occupation pathways to meet the demands of the labor market. The latest federal revision of the

Secondary Education Act of 1965, the “Every Student Succeeds Act” (ESSA) adopted in 2015, provides a framework for school and knowledge needed for specified occupation pathways to meet the demands of the labor market. The latest federal revision of the requirements in the 21st century. ESSA prescribes an urgency to prepare students on a national scale for success in careers and postsecondary credential attainment. The Strengthening Career and Technical Education for the 21st Century Act (2018) further creates a sense of urgency to integrate academic and technical education. Even in a strong job market with low overall unemployment, a substantial number of youths are disconnected from work and schooling. “Being disconnected during early ages (between sixteen and twenty-four) can have negative impacts on future labor-market success and other outcomes” (Loprest, Nightingale, & Spaulding, 2019). Though there is a clear need for integration of CTE combined with academics in public schools across the nation, public schools present microcosms of societal challenges. We must design and implement a non-traditional system of education that meets the needs of our future prosperity and engages our youth in future career preparation.

METHODS

The instrumental case study was conducted across four school sites in Kansas. The eight participants were affiliated with schools which had school redesign practices in place to increase postsecondary credential

attainment. The participants were superintendents, principals, assistant principals, and teacher leaders.

One of the questions that guided this study for data collection and analysis was: what innovations are rural high schools in Kansas utilizing to facilitate Career and Technical Education (CTE)?

School redesign strategies being implemented include, but are not limited to:

- facilitating student-centered-personalized learning
- providing project-based learning with civic engagement
- implementing advisory periods to encourage hybrid models of college and career planning versus counselor-centered models
- employing career coaches
- enacting student-led conferences
- adding career pathway offerings with real-world experiences embedded for internships
- utilizing flexible scheduling
- implementing flexible classroom arrangements, programs, and approaches

These strategies were implemented to support students with the development of academic, technical, interpersonal, intrapersonal, and social-emotional competencies in pursuit of postsecondary credential attainment.

Findings from this study indicate that increasing the amount of relevant experiential learning associated with work-study, job-shadow, internship, and civic engagement is necessary with continued improvement and support for CTE pathways. School-community partnerships can merge career and technical education with academic and real-world experiences in a multitude of ways, such as through mentoring, job-shadowing, service learning, school-to-work programs, internships, apprenticeships, and service in an advisory role to career and technical programs (Schafft & Harmon, 2011). Career pathways are a beneficial method for connecting academic, technical, and cognitive skills that, combined, contribute to successful matriculation into college and the workforce. CTE is transforming traditional vocational education, which consisted of low-level coursework and job training, by replacing it with academic rigor, and integrated, sequential learning that aligns with and leads into postsecondary credential attainment (American Institutes for Research, 2013). Higher earnings and lower rates of “idleness” (not working nor in school) are confirmed among those taking upper-level vocational classes combined with rigorous academe, suggesting the value of more intensive involvement in CTE (Kreisman and Stange 2017).

This study found that intentional and deliberate enrichment and development of non-academic competencies that promote college and career readiness must be integrated in schools to promote postsecondary credential attainment. Many secondary schools are responding to research that supports the development of non-academic competencies, “often referred to as soft skills, employability skills, social/emotional skills, college readiness, character development, affective, or life skills, necessary for employment success” (Noonan & Erickson, 2018, p.2). Non-academic competencies and their effect on skill formation for college and career success have not been included in academic discussions in research until the past decade (Heckman & Rubinstein, 2001; Kyllonen, 2013). (See Figure 1-1)

Students must be empowered and granted ownership of their learning to develop

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student agency and the academic tenacity necessary for postsecondary credential attainment. Students must master the skills associated with Noonan and Erickson’s (2018) college and career competency wheel (See Figure 1-1) to strengthen the college and career competencies associated with postsecondary credential attainment (Noonan & Erickson, 2018).

Figure 1.1



Personalized and relevant real-world experiences are necessary and should reflect student interests to develop skills for seamless matriculation into postsecondary training. Many schools in our nation are “Industrial Age” organizations existing in an “Information Age” world, and the delivery system is an assembly line where time for learning is the constant and the quality of learning is the variable (Schwahn & McGarver, 2012). Consequently, many students lack motivation to do well in school which positively correlates to a students’ motivation to continue to seek learning in a postsecondary setting.

CONCLUSION

The findings and descriptions of this study may have significant potential to positively impact postsecondary credential attainment in the 21st century. All professionals within the realm of law and policy, education, psychology, and social work may find benefit in the contents of this study. A non-traditional, 21st century approach to education is the key to the productivity of our great nation, especially when combined with the microcosm of social factors that influence quality of life being witnessed inside our American classrooms. A non-traditional approach to education includes academics as well as technical education inclusive of access for all students in an equitable manner. A strong focus on interpersonal and intrapersonal skills is necessary to prepare students for employability. Equally important, this study also provided insight into approaches utilized by rural secondary schools in Kansas who are committed to implementing evidence-based practices in school redesign. These practices are designed to support and develop the skills necessary for students to internalize which contribute to higher rates of postsecondary credential attainment. The practices described in this study may be transferable to other schools with national attention drawn to postsecondary credential attainment.

RESEARCHER RECOMMENDATIONS

Students should be provided experiences in real-world settings aligned with individualized careers of interest. Personalized learning plans should integrate rigorous academic, interpersonal, intrapersonal, and social-emotional development. This sets the stage for seamless matriculation into postsecondary programs that provide the necessary credentials for employment within those specific careers. Career and Technical Education is a platform through which this can be achieved. Combining technical education with academic rigor and personal development provides a student with a well-rounded approach to future planning. Further, when CTE programs are designed to suit student interest in diverse rural school settings, the potential to positively impact the local rural community and economy increase. CTE is a viable pathway to helping students achieve advanced credentials, since most jobs in the 21st century require postsecondary credentials of some kind.

"A strong focus on interpersonal and intrapersonal skills is necessary to prepare students for employability."

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CONTACT INFORMATION

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