

Appendix E: Abstract of Proposed Study

Evaluation of the Arlington Tech High School Program

Arlington Tech High School, which admitted its inaugural class during the 2016/17 school year, aims to prepare its students for success both in college and in the workplace through the use of innovative career and technical education (CTE) strategies.

Three of the main CTE strategies used by Arlington Tech include:

- 1) Project-based learning, in which students develop both skills and knowledge through real-world problem solving.
- 2) Work-based learning (including work-based internships and employer partnerships), in which students, often with the support of local businesses, develop both skills and knowledge through hands-on learning in industry-standard CTE workshops and labs.
- 3) Dual enrollment, in which students develop skills and knowledge through taking both academic and CTE postsecondary courses taught at Arlington Tech by Arlington Public School teachers who are certified as Northern Virginia Community College adjunct faculty.

CNA Education plans to conduct a four-year evaluation of Arlington Tech High School, beginning with formative data collection in fall of 2017 and ending with final summative data collection in spring 2021.

This proposed study will be a mixed-method evaluation. This will consist of an implementation evaluation of Arlington Tech’s strategies and an impact evaluation to examine the effect of Arlington Tech in improving its students’ academic, postsecondary readiness, and labor market success outcomes.

The implementation evaluation will consist of semi-structured half-hour interviews with Arlington Tech staff and surveys of employers of Arlington Tech graduates. Based on participant responses, we will develop a set of descriptive codes that capture main themes of the data.

The impact analysis will use de-identified student transcript, demographic (e.g. race/ethnicity, free or reduced price lunch status), and behavioral data (e.g., suspensions) provided by APS. Arlington Tech students will be compared with Arlington Public School students enrolled in traditional CTE programs along the following success indicators:

Outcome	Measures
General academic outcomes	Student GPA
	Standards of Learning (SOL) assessment scores
	Attainment of a high school diploma or its

Outcome	Measures
	state-recognized equivalent
	Enrollment in postsecondary education following program participation
Postsecondary readiness outcomes	Participation in dual enrollment program
	Attainment of postsecondary/industry recognized credentials during program participation
	Attainment of postsecondary credit during program participation
	Completion of a CTE concentration
	Technical skills attainment (as applicable to the program of study)
Labor Market success outcomes	Employment in a job related to a students' field of study (as applicable)
	Earnings (as applicable)

Student data will undergo matching analysis to allow for a direct comparison of Arlington Tech students to APS students enrolled in traditional CTE courses. The results from this analysis will be used to gauge the success of the Arlington Tech program.

The impact evaluation will also include both a survey of employers who work with Arlington Tech students to document employers' perceptions of partnerships with Arlington Tech and students' skills, as well as a survey of graduates' employment and earnings outcomes. Both of these surveys will be distributed in Spring 2021. These survey instruments will be created collaboratively with Arlington Tech, based on staff research interests and previous surveys of employers who have worked with high schools and secondary students.