

## Analysis of School District of Philadelphia Career and Technical Education (CTE) Students in 2012-16 Cohort

A study of the 9<sup>th</sup> grade cohort of high school students entering high school in 2012-13 was conducted by the School District of Philadelphia's Office of Research and Evaluation (ORE) in collaboration with the Office of Career and Technical Education (OCTE). Each year, ORE conducts an analysis of the outcomes of students that participate in the District's Career and Technical Education (CTE) offerings. Below is a summary of the analysis and focuses on some key comparisons between students that took CTE courses and those that did not. In examining the four years beginning with the 9<sup>th</sup> Grade cohort in 2012-13 and ending with their scheduled graduation in 2015-16, the report analyzes the following:

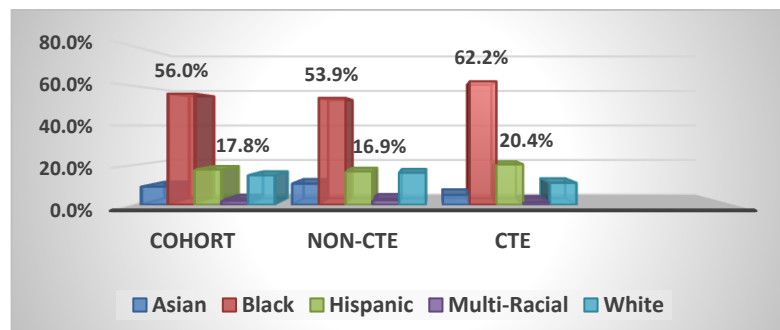
1. Cohort characteristics including demographics, prior achievement, and attendance
2. Graduation outcomes
3. Credit accumulation

### Cohort Characteristics

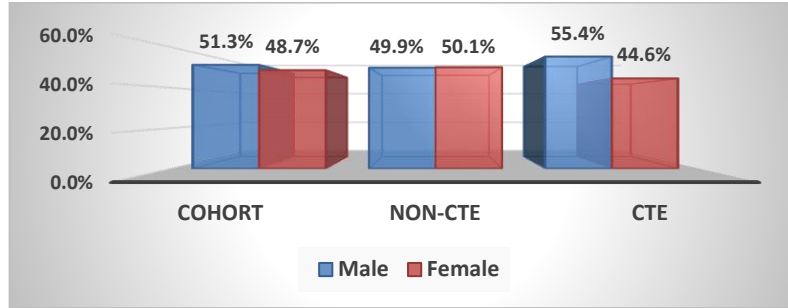
This study only includes the data for students that were first-time 9<sup>th</sup> graders in 2012-2013. It does not include students that joined this cohort in later years. All included students are referred to as the "Cohort," and is divided into two subgroups: **CTE** and **Non-CTE**.

CTE students are defined as a student who took any type of a CTE course (within an approved CTE Program of Study) at any time during the four years in high school. All other students are considered *Non-CTE*. At the present time, there are five all-CTE schools in the School District of Philadelphia (SDP). Students apply for admission to these schools, and all students in grades 10-12 participate in CTE. There are other schools (i.e. neighborhood, special admission) that also offer CTE courses alongside more traditional academic curricula.

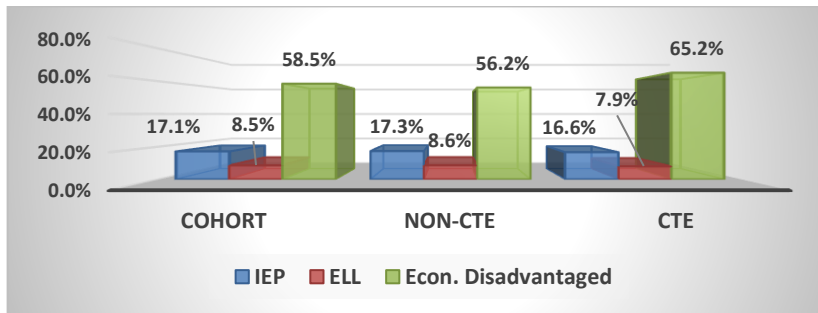
1. CTE students are more likely to be Black (62.2%) or Hispanic (20.4%).



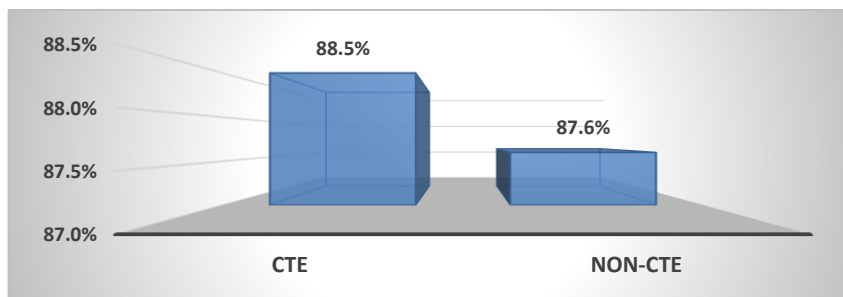
2. Males made up the greatest population in CTE programs (55.4%) than non-CTE programs (44.6%).



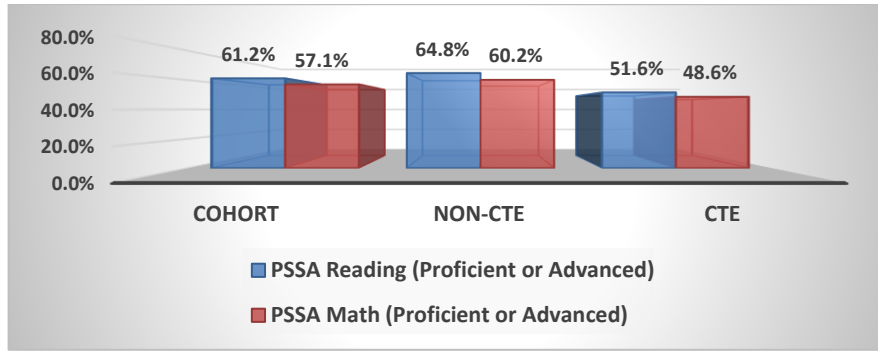
3. There are more economically disadvantaged students in CTE programs (65.2%) than non-CTE programs. There are also a lower percentage of English Language Learner (ELL) students (7.9%) and IEP students (16.6%) in CTE programs.



4. Students in CTE programs had a greater Average Daily Attendance (ADA) prior to entering 9<sup>th</sup> grade (88.5%).



5. CTE student had a lower percentage of students who achieved Proficient or Advanced (51.6% Reading; 48.6% Math) levels in their 8<sup>th</sup> Grade PSSA testing prior to entering high school.



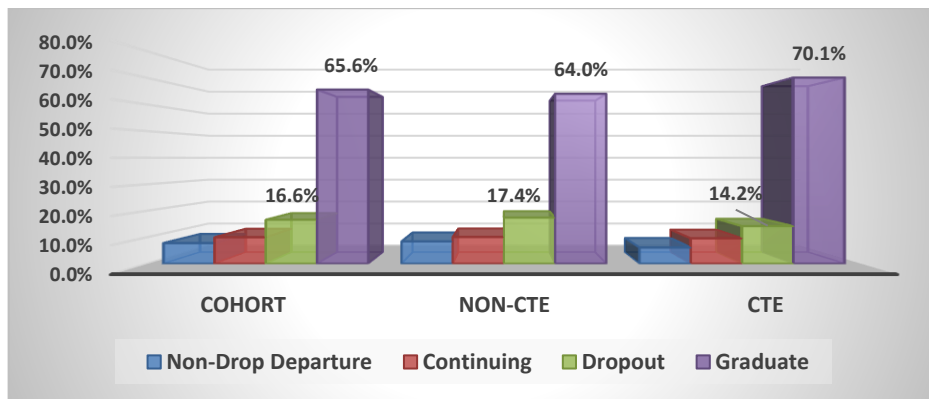
## Graduation Outcomes

Graduation outcomes describe the full range of possible circumstances that a student in the 2012-16 cohort might possess after four years in high school. The possible outcomes are as follows:

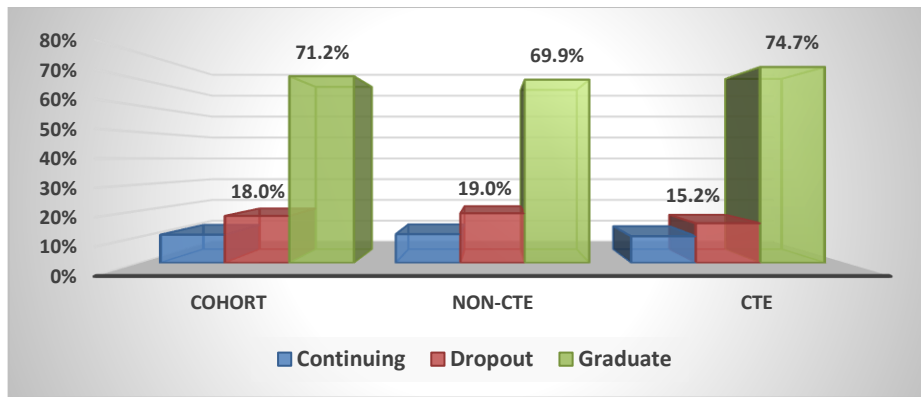
1. Graduated
2. Continuing (still enrolled)
3. Dropped out
4. Non-drop departure (students that leave SDP, but do not drop out of school)

The graduation rate excludes non-drop departures. This is the standard statistic that is used to express the percentage of students that graduate within the four years of their first 9<sup>th</sup> grade year.

1. **CTE students had a higher graduation rate (70.1%) compared to non-CTE students (64.0%). In addition, students in CTE programs were less likely to drop out of school (14.2%) compared to 17.4% of non-CTE students.**



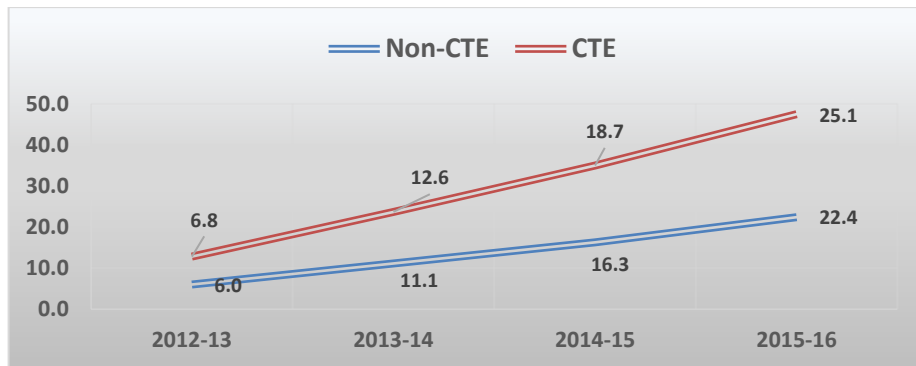
2. **CTE students had a higher graduation rate for students graduating in four years after starting school in 2012-13 school year (74.7%) than non-CTE students (69.9%). In addition, CTE students were less likely to drop out with four years (15.2%) compared to non-CTE students (19.0%).**



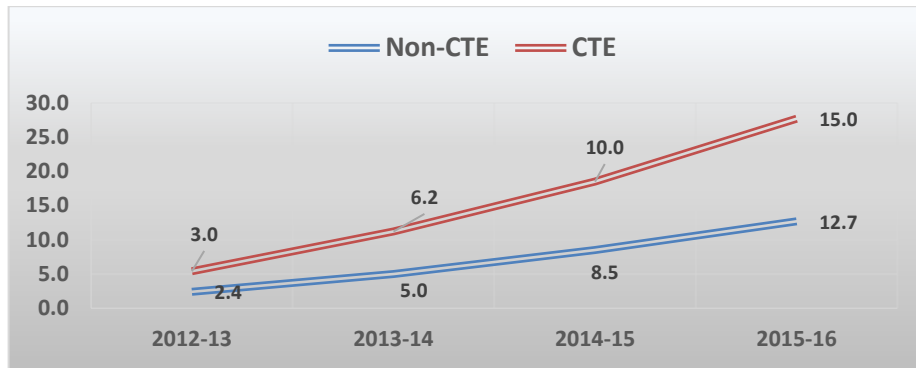
### Credit Accumulation

An analysis of the number of credits accumulated by CTE and non-CTE students for each subject (core and non-core) as well as, the overall total number of credits was conducted. Average number of credits was computed over four academic years (2012-13 to 2015-16). Only students who entered 9<sup>th</sup> grade during the 2012-13 academic school year were included.

- Compared to non-CTE students, CTE students accumulated more credits per year during the four years in high school. Similarly, CTE students tended to collect slightly more core subject credits (Math, Science, English, Social Studies) compared to non-CTE students.**



- For students in grade recovery (repeated 9<sup>th</sup> grade), CTE students tended to acquire more overall credits compared to non-CTE students. The analysis proves that CTE can be an effective component of grade recovery.**



**3. SDP has specific graduation requirements in terms of the number of credits and courses needed in order to qualify. The District requirements are as follows:**

- English (4 credits)
- Math (3 credits)
- Science (3 credits)
- Social Studies (4 credits)
- World Language (2 credits)
- Arts and Humanities (2 credits)
- Physical Education (1 credit)
- Health (.5 credits)

**Total Credits – 23.5**

Nearly half of the students in the cohort did not satisfy all credit requirements. However, the analysis did show that CTE students (18.0%) were more likely to meet the total credit requirement of 23.5 credits than non-CTE students. In addition, CTE students were also more likely to satisfy both core and raw credit requirements.

