EdWorkingPaper No. 23-889

Misclassification of Career and Technical Education Concentrators: Analysis and Policy Recommendations

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Career and Technical Education (CTE) prepares students for life beyond high school by providing practical labor skills, workforce credentials, and early post-secondary credits. States are required to report the number of CTE concentrators to receive federal Perkins funding, but systems of identifying students as concentrators vary among states. We analyzed two distinct concentrator identification strategies, one based on local education agency administrator reporting and another universal screening system using transcript data. Analyses revealed moderate amounts of mismeasurement in concentration status and modest amounts of systematic mismeasurement penalizing students who qualify for free or reduced-price lunch, English language services, and special education services.

VERSION: January 2024

Suggested citation: Huang, Yue, Hojung Lee, Arielle Lentz, and Kenneth A. Shores. (2023). Misclassification of Career and Technical Education Concentrators: Analysis and Policy Recommendations. (EdWorkingPaper: 23-889). Retrieved from Annenberg Institute at Brown University: https://doi.org/10.26300/esab-m159

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This project was completed with funding from IES R305S210008 "The Distributional Effects of Secondary Career and Technical Educational (CTE) Programs on Postsecondary Educational and Employment Outcomes: An Evaluation of Delaware's CTE Programs of Study"

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Abstract

Career and Technical Education (CTE) prepares students for life beyond high school by providing practical labor skills, workforce credentials, and early post-secondary credits. States are required to report the number of CTE concentrators to receive federal Perkins funding, but systems of identifying students as concentrators vary among states. We analyzed two distinct concentrator identification strategies, one based on local education agency administrator reporting and another universal screening system using transcript data. Analyses revealed moderate amounts of mismeasurement in concentration status and modest amounts of systematic mismeasurement penalizing students who qualify for free or reduced-price lunch, English language services, and special education services.

Misclassification of Career and Technical Education Concentrators: Analysis and Policy Recommendations

Introduction

Career and Technical Education (CTE) prepares students for life beyond high school by providing practical labor skills, workforce credentials, and early post-secondary credits to help students explore career pathways. In addition to practical skills and credentials, CTE programs benefit students in terms of academic success, career trajectory, and lifetime earnings (e.g., Dougherty, 2018; Goldstein & Witzen, 2019; Kulick, 1998). Further, students who deepen their CTE participation by completing the required coursework to concentrate in a specific career pathway see even greater benefits than students who do not concentrate (Ecton & Dougherty, 2023).

While concentrating in a CTE career pathway benefits students beyond normal CTE participation, federal guidance does not specify a uniform process for states to identify CTE students as concentrators (Association for Career and Technical Education, n.d.). Without federal requirements for how to identify concentrators, states are left to determine the best approach for statewide measurement. Though nationwide data on approaches states use to identify CTE concentrators are not available, we expect states to vary in how they do this. For example, in Delaware alone, the site and partner for this study, two systems have been used to identify concentrators. Through the 2020-21 academic year, Delaware relied on reporting from local education agencies (LEAs) via a webform. Beginning in the 2021-22 academic year Delaware initiated a trial run of a centralized reporting system based on their ability to track student coursetaking via its state longitudinal data system, where completion of requisite courses signified CTE concentration.

Ex ante, these two approaches can be expected to yield different results, both in terms of accuracy and equity. With respect to accuracy, it is possible through clerical error or due to administrative burden that LEAs might misreport CTE concentrators, either by missing those that should have been counted or counting those that should not have been. Our concern is more related to equity, which we think can be identified if specific subgroups of students are systematically mis-counted by LEAs. We define systematic to mean that a group of students is statistically significantly more (or less) likely to be mis-reported than the population average. We can expect such systematic mis-reporting because of the vast empirical literature that has shown discretionary processes are more likely to create inequities relative to universal or standardized processes (e.g,. Card & Giuliano, 2016; Fish, 2019; Quinn, 2020).

Given the benefits students see from CTE concentration and the risks of misclassification from non-uniform reporting requirements, it is imperative to ensure that identification of concentration status is accurate and consistent for all students. We partnered with the Delaware Department of Education (DDOE) to review the state's identification strategies and determine if inequities exist that could prohibit students from reaping the benefits of concentrating. More specifically, the research questions guiding this study include:

1. What proportion of Delaware students are correctly identified as concentrators?
2. Which student subgroups are more or less likely to be misclassified as concentrators in Delaware?

To assess the possibility of systematic misidentification of concentrators in Delaware, we quantitatively analyzed student-level coursetaking data to determine how frequently students' concentration status based on their courses aligned with the state's previous method of identifying concentrators via LEA-reporting, a dataset provided to us by our state partners. We then statistically analyzed whether LEA misreporting (as compared to course-based evidence of concentrator status) was systematically associated with student demographic characteristics.

Our results show that LEAs miss 11% of students for whom course records indicate are CTE concentrators and exaggerate 5% of students for whom course records indicate are not concentrators. We also find evidence of systematic misclassification whereby students who earned concentrator status are not reported by the LEA (i.e., missed concentrators). Rates of missed concentrator status are greater for English Language Learners (ELLs), students with individualized education plans (IEPs), and economically disadvantaged students (i.e., free- or reduced-price lunch (FRPL) eligible), though we see no evidence of systematic misclassification of students by race/ethnicity. We conclude with policy recommendations.

Study Context and Policy Description

Perkins Requirements for State Monitoring of CTE Concentration

In 2018, the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) reauthorized the federal government's commitment to CTE. This law implemented updated funding mechanisms and policy governance and authorized nearly $1.4 billion of annual spending to support states in implementing CTE. Perkins V required states to complete local applications to receive funds, including documentation of student performance, CTE program offerings, staff recruitment, retention, and training plans, and accessibility to CTE across student subgroups (ExcelinEd, 2018). Perkins V also enabled states to design CTE to reflect local needs, such as ensuring CTE offerings align with local job markets, deciding how to spend Perkins funds at local levels, and establishing definitions for data use that accurately document processes and outcomes aligned to their CTE programs.

To support states with identifying concentrators, Perkins V provided a baseline definition to identify students as concentrators. This definition included any secondary school level student who has completed at least 2 courses in a single career and technical education program or program of study; and has earned at least 12 credits within a career and technical education program or program of study (Carl D. Perkins Career and Technical Education Act of 2006, 2018). While this definition serves as a basis for state guidance, states are then able to modify this definition to align with their data collection efforts. Further, states are not required to follow a uniform process for identifying students as concentrators, increasing the possibility of misclassification of students due to distinct identification strategies.

Benefits of Concentrating

Ample research documents the benefits students see when participating in CTE. In terms of high school completion, Kulick (1998) identified that participation in CTE reduced dropout rates for high schoolers by about six percent. More recently, CTE participation was shown to increase the probability of on-time graduation from high school for students by seven to ten percentage points (Dougherty, 2018) and annual wages (Goldstein & Witzen, 2019). These results translate to CTE concentrators as well (Carruthers et al., 2020; Ecton & Dougherty, 2023; U.S. Department of Education, 2019). These benefits are larger for students with disabilities (Wagner et al., 2016) and low-income students (Dougherty, 2016).

We know of no research that disentangles the effect of developing skills through concentration versus earning credentials, and, consequently, we cannot say whether a student who is misclassified as a non-concentrator but has taken sufficient courses to be counted as one has been harmed by this error. Nevertheless, we believe there is enough evidence that being a CTE concentrator–including both the human capital development that comes from the program as well as potential benefits from the credential itself–makes misclassification a worthwhile problem to solve, both for students and for compliance with federal policy.

State Approaches to Defining & Identifying CTE Concentrators

Even with federal guidelines, states define concentrators differently. For example, California defines a concentrator as “a CTE student who completes at least 300 hours of course sequence in an industry pathway, and the sequence includes the capstone course; and the CTE student receives a grade of C- or better in the capstone course,” (Perkins Collaborative Resource Network, 2020). In Michigan, a concentrator is “a secondary student who has completed a minimum of 50% of state approved standards plus enrolled in more credits, courses, hours or units in a single program area to meet the additional standards” (Perkins Collaborative Resource Network, 2020). In the state that is of the focus of this study, Delaware, a student is considered a concentrator if they participate in two or more sequenced CTE courses within a career program of study (Delaware Department of Education, 2020).

To our knowledge, the methods states use to identify concentrators are not systematically reported or even generally publicly available on individual state websites. For example, in California and Wisconsin where detailed descriptions about CTE concentrator requirements are readily available, we found no information about how states ensure these requirements are met (e.g., via centralized course records or LEA self-reports). Further, in the federal government website of Workforce Innovation and Opportunity Act (WIOA) there includes a list of state CTE plans, but there is no indication for how concentrator status is identified by states.

When we began our study, identification of concentration status occurred at the local level, meaning LEA staff reported if a student met the requirements necessary to be a concentrator. While this method allowed LEAs to account for unique circumstances of the student, such as whether the student transferred into the state with CTE credits, it can also result in misclassification of student concentrators who should otherwise be included. For example, students with the requisite course records might not be correctly identified by school and district personnel responsible for inputting this information, for reasons such as human error or potential biases that might cause personnel to systematically underidentify minoritized or economically disadvantaged groups of students or systematically over-identify less marginalized groups of students.

Educational Inequity from Non-Uniform or Discretionary Identification Protocols

Such biases in the identification of students are routinely identified in education research. For example, Fish (2019) identified that students of color, particularly Black and Hispanic students, are increasingly identified as having disabilities when the racial composition of the school becomes more White, suggesting that racial composition of schools influences classification decisions. Similarly, Shores et al. (2020) found that that student's race relates to their classification in special programs. Quinn (2020) showed that identical student essays were graded differently when student names denoting race are randomly assigned, and that a more uniform grading system in the form of a rubric reduced racial bias in grading. Similarly, when examining different strategies for deterring inequity in the identification of gifted students, Card and Giuliano (2016) found that a universal screening program increased in the numbers of low-income and historically minoritized students identified as gifted. Taken together, these findings raise concerns that similar inequities may occur when classifying students as CTE concentrators using non-uniform reporting requirements.

Data

Sample

The data for our study originated from longitudinal databases maintained by the Delaware Department of Education. We received four types of data spanning the school years between 2014-15 and 2020-21, including: (1) student demographics (e.g., cohort, grade, gender, race, ELL status, IEP status, FRPL status), (2) student concentrator status assigned by LEA, (3) student CTE course-taking records (e.g., course name, course code, course performance), and (4) CTE course information that links CTE course codes with specific CTE programs of study.

We constructed our analytic sample by including as many students as possible with a full four years of course taking data and organized these students into cohorts. In partnership with DDOE, we defined a student's "Cohort" as the year of expected graduation, assuming four-year completion. Because the available data spanned school years 2014-2021, this process resulted in five cohorts. For example, a ninth grader in 2014 was expected to graduate in 2017, and thus belongs to Cohort 2017. We could examine this student's full course-taking history from 2014–2017 when he/she completed Grades nine through twelve, and therefore we could confidently identify this student's concentration status by considering their full course history.

Our final sample for analysis consisted of 52,184 students from five graduating cohorts from 2017–2021. In Table 1, we share descriptive statistics of the sample. Among all students in the sample, around half are male and white. About one-third of students are Black, over 16% of the students are Hispanic, four percent are Asian, and the remaining 2% of the students are considered as “Other” race(s). Among special categories, about 14% have been designated as participating in ELL programs, 37% receive FRPL, and 16% have an IEP. While we recognize that gender is not restricted to male and female, and the race and ethnicity that students identify with is not restricted to the five categories included, we maintained the categorizations of gender and race consistent with the available data from the state. We acknowledge that these categorizations may not fully capture the diversity of gender and race complexities.

< TABLE 1 >

Identification of Concentrators

As mentioned, LEAs traditionally reported CTE concentrators directly to the state based on their own internal criteria not directly observed by the state or researchers. We also identified concentrators based on students’ course records. Students are classified as a concentrator based on course records if they participated in and passed two or more sequenced CTE courses within a specific career program of study. For example, according to DDOE’s definition, a student who participated in the Exploring Computer Science course and the Computer

Science Principles course and passed both courses can be considered as a concentrator in the Computer Science program. Delaware makes identification of sequenced CTE courses straightforward because all courses are assigned a unified CIP course code, which indicates program of study and the sequence level.

With these two measures of reporting, it is possible to construct four categories of CTE concentrator measurement. These categories are true concentrators, true non-concentrators, exaggerated concentrators and missed concentrators. True concentrators were defined as those students who were identified as concentrators both by LEA reporting and our course-based approach. True non-concentrators are those students that were not identified by their LEA as a concentrator or by course records. Students were defined as exaggerated concentrators when their LEA said they were concentrators, but their course-taking history did not show evidence of enough coursework to be considered a concentrator. Finally, students were considered as missed concentrators when they were not identified by their LEA as concentrators, but their course history indicated that they should have received this distinction.

Statistical Methods

In response to our first research question regarding what proportion of students are correctly identified as concentrators, we calculated the proportion of students overtime that fell within each classification of concentrator. In response to our second research question regarding the extent to which certain student subgroups were systematically misidentified as a concentrator, we used logistic regression to examine the differences in likelihood of missed or exaggerated as a concentrator among student subgroups. These models take the following form:

$$Ln\left(\frac{p}{1-P}\right) = \beta_0 + \beta_{1j}\boldsymbol{X}_j + \gamma_c + \varepsilon$$

Where $Ln\left(\frac{p}{1-P}\right)$ represents the likelihood of a student being an exaggerated or missed concentrator, respectively (we fit a multinomial logistic regression, which is the generalized form of the binary logistic regression); β_0 represents the intercept that is the relative rate of the outcome category for the reference group; β_{1j} represents the slope coefficient from the vector of focal groups X_{1j}, where j indexes a focal group (e.g., male students). The variable ε represents random error adjusted for heteroskedasticity. We include cohort effects γ_c in the pooled model to control for time trends.

One characteristic of these regression-based approaches is that a reference group is needed to identify differences in rates of misclassification by subgroup. Often, researchers take as the reference group the majority or non-minoritized group, such as White students. Such an approach can problematically imply that White students have the correct rate of misclassification and can reinforce dominant culture and deficit-framing for the focal groups. To avoid these implications, we take an approach called effect size coding, which allows us to contrast a group's rate of misclassification relative to the population average (e.g., Mayhew & Simonoff, 2015; Ro & Berghom, 2020). In practice, we calculate the difference in the predicted probabilities of having one's concentrator status exaggerated or missed relative to being a true concentrator for individual subgroups (i.e., female, male, Asian, Black, Hispanic, Other Race, White, ELL, non-ELL, FRPL, non-FRPL, IEP, and non-IEP) and compare those predicted probabilities to those for the population. For example, if the likelihood of having one's concentrator status missed is 11.07% for the population and is 12.49% for Black students, we report an effect size of 1.42%. Such an approach is different from traditional reporting, which would contrast the probability of a student's concentrator status as being missed for Black students relative to White students.[1]

Lastly, we examined the proportion of misclassified students that belong to specific programs of study and schools to identify if specific programs or schools account for a majority of misclassification.

Findings

In response to our first research question regarding what proportion of students are correctly identified as a concentrator, we found that LEAs correctly

[1] This approach is straightforward to implement. We use Stata Version 17.0 to estimate the multinomial logistic regression as indicated in Equation 1. Then, using Stata's post-estimation `-margins gw.-` syntax we recover the focal group's rate of misclassification relative to the population rate of classification. For example, to recover the female rate of CTE concentrator status missed (i.e., a reference category in the regression) relative to the population rate, we write `margins gw.0.gender_final, predict(outcome(2))asobserved`

identified a majority of students (*n*=43,527, 83.41%). Over half of students (*n*=27,040, 51.82%) were what we consider a "true concentrator," meaning their courses aligned with the LEA's designation of that student as a concentrator. Nearly a third of students (*n*=16,487, 31.59%) were a "true non-concentrator," meaning neither their course data, nor the LEA classified the student as a concentrator. This left a modest amount of misclassification across the state, where 16.59% (*n*=8,657) of students were incorrectly identified in their CTE participation.

Among all students, 5.52% (*n*=2,882) were exaggerated as a concentrator, meaning the LEA designated the student as a concentrator despite their course taking behavior not showing evidence. The state has argued that exaggerated concentrator status is not necessarily a problem of mis-reporting, as LEAs may observe course records from out of state or other pertinent information that accounts for a student's designation that would not be observed by course records alone. For this reason, the state initiated a hybrid concentrator designation approach, which identifies CTE concentrators from course records to start and allows LEAs to supplement that list with their own concentrators.

More consequential from a standpoint of equity, we found that 11.07% (*n*=5,775) of students were missed, meaning they earned a concentrator designation by taking required courses but did not receive that designation by the LEA. These mismeasurement rates remained consistent over time except in the

2021 school year, when the state advised LEAs that they would take on more responsibility identifying concentrators via coursetaking records, and, as a result, LEAs decreased reporting rates. In this year, a greater proportion of students were missed as concentrators. These 5,775 students across five cohorts of data represent students whose course records indicate the requisite number of credentials earned within a program of study but whose accomplishments were not reported by the LEA responsible for them.

[Figure 1]

In response to our second research question, we examined if certain student subgroups (meaning students who fall into different classifications of gender, race/ethnicity, and participation in special programs such as ELL, FRPL, and IEP) were more or less likely to be missed or exaggerated as a concentrator. In terms of being exaggerated as a concentrator, we found that the students who participate in FRPL (0.74 percentage points (PP); p-value (*p*) $< .001$; 95% Confidence Interval (CI) [0.46 PP - 1.02 PP]) and students who identify as an "Other" race (2.07 PP; $p = .005$; 95% CI [0.64 PP - 3.51 PP]), were slightly more likely to be exaggerated relative to the population. Alternatively, students who do not participate in FRPL were slightly less likely to be exaggerated relative to the population rate (-0.43 PP; $p < .001$; 95% CI [-0.60 PP - -0.27 PP]).

[Figure 2]

More consequentially, we find that students who were more likely to be missed as a concentrator included: males (0.39 PP; $p = .004$; 95% CI [0.12 PP - 0.65 PP]), students who participate in ELL programs (1.93 PP; $p < .001$; 95% CI [0.96 PP - 2.89 PP]), students that are eligible for FRPL (1.07 PP; $p < .001$; 95% CI [0.69 PP - 1.44 PP]), and students with IEPs (1.29 PP; $p < .001$; 95% CI [0.65 PP - 1.93 PP]). Females (-0.40 PP; $p = .004$; 95% CI [-0.67 PP - -0.12 PP]), students who identify as Asian (-2.40 PP; $p < .001$; 95% CI [-3.63 PP - -1.16 PP]), students who do not participate in ELL (-0.30 PP; $p < .001$; 95% CI [-0.45 PP - -0.15 PP]), students that are not eligible for FRPL (-0.63 PP; $p < .001$; 95% CI [-0.85 PP - -0.41 PP]), and students without IEPs (-0.25 PP; $p < .001$; 95% CI [-0.38 PP - -0.13 PP]) were slightly less likely to be missed as a concentrator as compared to the population rate.

One question that emerges from these results is whether the magnitudes are practically meaningful. For example, is the missed rate of 1.93 percentage points for ELL students large? An answer to this question is unavoidably subjective, but one way to think about it is in relation to the base rate of 11.07 percent. An increase of 1.93 percentage points represents a relative risk of 1.17 (i.e., ELL students are 1.17 times more likely to be missed than a randomly selected student). Alternatively, 1.93 percentage points represents 16%, or 0.06 standard deviations, of the population missed rate. Kraft (2020) shows that median effects in math are often between 0.04 to 0.09 standard deviations, which would place the rate of misclassification for ELL students in this study as "medium" in effect size units. This characterization would extend to FRPL and IEP students.

[Figure 3]

Lastly, we examined the extent to which specific programs of study and schools accounted for misclassifying students. In terms of exaggerated concentrators, we found that the top three contributing programs of study among the 134 programs of study that had exaggerated concentrators included computer science, early childhood education, and marketing management, which accounted for 7.53%, 5.38%, and 5.38% of all exaggerated students, respectively. In terms of missed concentrators, the top three contributing programs of studies among the 75 programs of study that had missed concentrators included career exploration, animal science, and culinary arts, which accounted for 10.74%, 8.78%, and 8.71% of missed concentrators, respectively. These findings suggest that exaggerated students are not specific to a program of study, but rather spread across different programs of study. However, more than a quarter of all missed students belong to one of three programs of study.

When examining schools that most often exaggerate concentrators, we found that the top three contributors (among the total 44 schools that had exaggerated concentrators) accounted for 25.50%, 15.93%, and 6.49% of all exaggerated concentrators in the state. In other words, over half of exaggerated concentrators tended to derive from one of three schools in Delaware. As noted above, these schools may be ones for which many students have out-of-state course records that influence LEA reporting of CTE concentrators. We see less evidence of mis-classification concentrating in select schools for missed students; the top three contributors of missed concentrators (among the total 52 schools that had missed concentrators) accounted for 8.79%, 8.10%, and 6.80% of all missed concentrators, or about a quarter of all students in the state.

Discussion and Limitations

In Delaware, a CTE student's concentration status has been historically determined by the LEA. While this allows for LEAs to account for nuanced aspects of student behavior (e.g., out-of-state course records), it also allows for misclassification due to human error or potential intrinsic biases. In other contexts, such as gifted education, switching to an identification method based on student-level data has been shown to reduce inequities by increasing the presence of low-income and historically marginalized students in special programs (Card & Giuliano, 2016). While this strategy automates the identification of student CTE concentrator status and omits human error, it does not account for student-level nuances that the LEAs can more readily observe, such as transferring into Delaware with CTE courses from other states.

Our data suggest that a statewide hybrid system would be most equitable to identify students as concentrators. In the first stage of concentrator identification, the state would employ a centralized data system that classifies student's concentration status based on course records. Then, in the second stage, LEAs could supplement the data system's classification by listing a student as a concentrator if they were not previously designated. This system promotes equity for two reasons: (1) The main concern for inequity is a student whose course records are neglected and their concentrator status missed; the course records approach resolves issues of LEAs systematically missing earned concentrator status among student subgroups, (2) LEAs do not appear to systematically list students as concentrators for whom their course records indicate otherwise, and therefore allowing LEAs to supplement the course-based records would not privilege some student groups over others.

It is important for legislative policymakers, school district leaders, teachers and counselors to identify what can be changed to increase CTE participation for underrepresented student groups. Based on these results, we recommend states continue to implement centralized designation systems using course records to omit systematic inequities, while allowing LEAs to supplement identification when necessary. We additionally recommend coaching be provided to LEAs so that inequities are not introduced when supplementing statewide CTE concentrator designations with their own lists of students. Finally, we recommend monitoring CTE identification systems to ensure that LEAs are not systematically privileging specific subgroups when they supplement statewide CTE concentrator designations.

While this study offers important insights on the misclassification of students as concentrators in Delaware, we recognize several limitations to this work. First, our research may not generalize. The misclassification found in this study only accounts for inconsistency between the local administration and state administration of CTE programs in Delaware. Because states elect their own identification strategy to determine concentrators, Delaware's concentrator identification strategy may resemble other states' approaches and thus offer insights for other states to consider as they review their identification strategies. The fact Delaware had two systems also allowed us to make this novel comparison. Another limitation of this research is that we only offer quantitative evidence of student misclassification in Delaware. With only quantitative research, it is unclear what specifically drives the differences in how LEAs identify students. Other variables could describe the relationship observed that we are unaware of, and qualitative research with CTE practitioners could help uncover what factors may result in misclassification of students.

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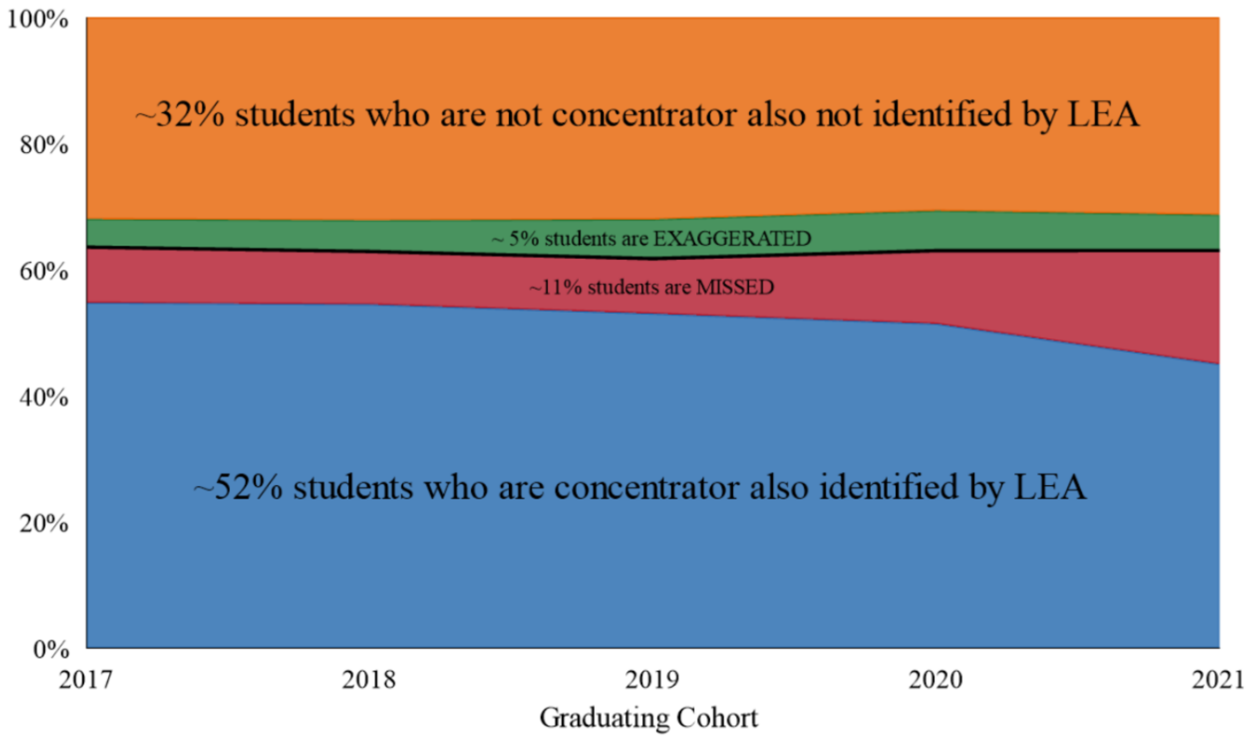
Table 1.
Descriptive Statistics of the Sample

Cohort	2017	2018	2019	2020	2021	Subgroup Total
Gender						
Male	5,351	5,317	5,083	5,706	4,974	26,431 (50.65%)
Female	5,146	5,167	4,996	5,340	5,104	25,753 (49.35%)
Race/Ethnicity						
Asian	345	390	390	417	401	1,943 (3.72%)
Black	3,350	3,372	3,217	3,592	2,979	16,510 (31.64%)
Hispanic	1,504	1,545	1,578	1,928	1,799	8,354 (16.01%)
Other	233	252	228	254	279	1,246 (2.39%)
White	5,065	4,925	4,666	4,855	4,620	24,131 (46.24%)
Special Groups						
ELL	1,243	1,251	1,377	1,665	1,524	7,060 (13.53%)
FRPL	3,832	3,999	3,693	4,294	3,484	19,302 (36.99%)
IEP	1,629	1,580	1,693	1,929	1,669	8,500 (16.29%)
Cohort Total	10,497 (20.12%)	10,484 (20.09%)	10,079 (19.31%)	11,046 (21.17%)	10,078 (19.31%)	52,184 (100%)

Note. Percentage in parenthesis. ELL refers to students identified as English language learners. FRPL refers to students who receive free- and reduced-price lunch. IEP refers to students with individualized education plans.

Figure 1.

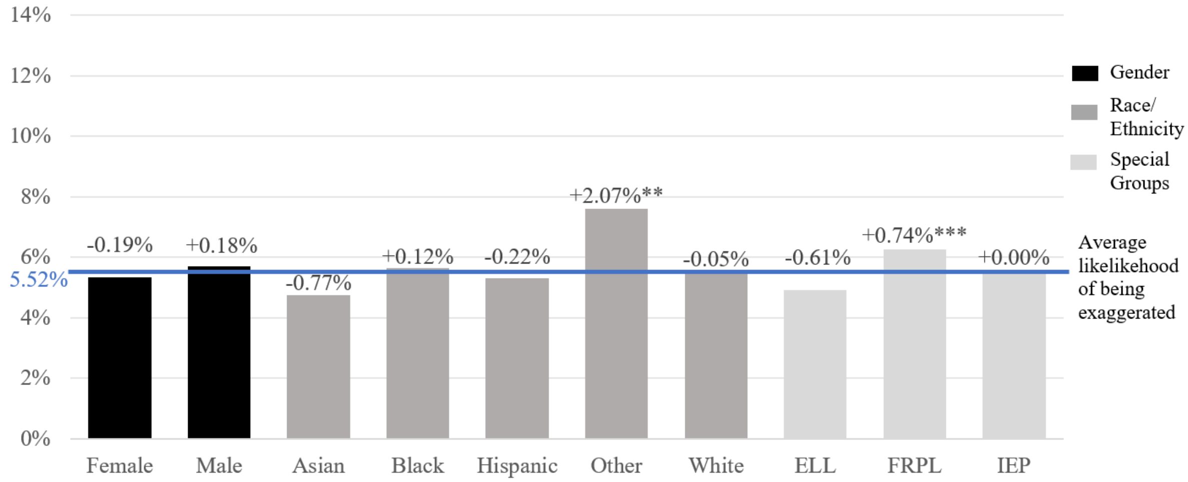
Proportion of Student Concentrator Identification From 2017-2021



Note. LEA refers to the Local Education Agency (e.g., school district)

Figure 2.

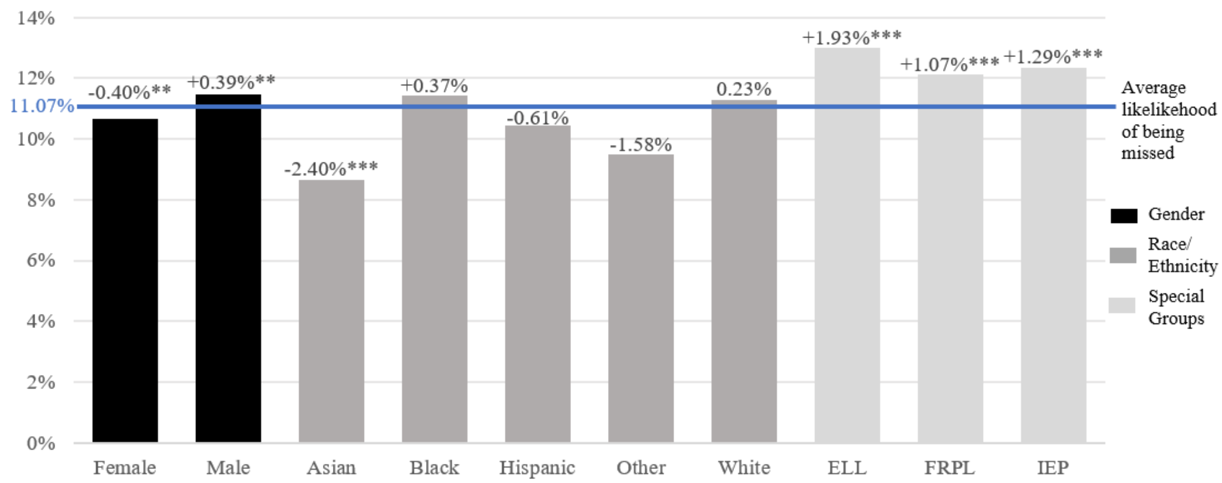
Subgroup Comparison in Likelihood of Exaggerated Concentration Status



Note. *** $p < 0.001$, **$p < .010$, ELL refers to students identified as English language learners. FRPL refers to students who receive free- and reduced-price lunch. IEP refers to students with individualized education plans.

Figure 3.

Subgroup Comparison in Likelihood of Missed Concentration Status



Note. *** *p* < .001, ***p* < .010, **p* < .050, ELL refers to students identified as English language learners. FRPL refers to students who receive free- and reduced-price lunch. IEP refers to students with individualized education plans.