

# Characteristics and Performance of High School Equivalency Exam Takers in New Jersey

*A Publication of the National Center for Education Evaluation and Regional Assistance at IES*



# Characteristics and Performance of High School Equivalency Exam Takers in New Jersey

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August 2021

Since 2014 the New Jersey Department of Education has offered three high school equivalency (HSE) exams for nongraduates seeking credentials: the GED, the High School Equivalency Test (HiSET), and the Test Assessing Secondary Completion (TASC). This study used data on exam takers who had been grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and who had attempted at least one HSE exam in New Jersey between March 2014 and December 2018. It analyzed how the characteristics of exam takers differ across exams and from the characteristics of non-exam takers, how the performance of exam takers with similar backgrounds varies, and how a recent reduction in the passing threshold for two of the exams affected passing rates. Among all students who had been grade 8 students in a New Jersey public school during the study years, HSE exam takers completed fewer years of school, were more likely to have been eligible for the national school lunch program in grade 8, and were more likely to identify as Black or Hispanic than non-exam takers. GED takers had received higher grade 8 standardized test scores, were more likely to identify as White, and were less likely to have been eligible for the national school lunch program in grade 8 than HiSET and TASC takers. Under the New Jersey Department of Education’s original passing thresholds, exam takers in the study sample were more likely to pass the HiSET and TASC than the GED on the first attempt (after grade 8 standardized test scores were controlled for). However, after the reduction in passing thresholds, the first-attempt passing rate was similar across the three exams. Under the new passing thresholds, two-thirds of GED takers and more than half of HiSET and TASC takers passed on the first attempt, and—when all exam attempts are included—three-quarters of all exam takers ever passed each exam.

## Why this study?

The New Jersey Department of Education (NJDOE) has prioritized offering alternative pathways that allow individuals who drop out of high school to demonstrate high school equivalency (HSE). One such pathway is the GED. Since World War II the GED has served as an alternative credential to a high school diploma. The exam was designed to give returning veterans the means to demonstrate skills comparable to a high school diploma without having to return to high school. Although substantial research documents that people who pass the GED do not have outcomes equivalent to those of high school graduates, some studies suggest that the GED was historically a valid measure of basic academic skills (Boesel et al., 1998; Heckman & Rubinstein, 2001). In 2014 the GED was redesigned to align with college and career standards. That year, two new HSE exams became available (see box 1 for definitions of key terms): the High School Equivalency Test (HiSET), developed by the Educational Testing Service, and the Test Assessing Secondary Completion (TASC), developed by CTB/McGraw-Hill. The HiSET and the TASC align with Common Core State Standards, are offered in pencil-and-paper formats as well as on computer, and cost less out of pocket to exam takers than the GED (Shaffer, 2015).

Since 2014, 14 states have adopted the TASC and 22 states have adopted HiSET as alternatives to or replacements for the GED. Twelve states, including New Jersey, offer all three HSE exams (CareerOneStop, n.d.).<sup>1</sup> According to U.S. Department

For additional information, including technical methods and supporting analyses, access the report appendixes at <https://go.usa.gov/xFRy5>.

1. One other jurisdiction in the Regional Educational Laboratory Mid-Atlantic region—Pennsylvania—also offers all three HSE exams. Delaware, the District of Columbia, and Maryland offer only the GED.

of Education guidance to postsecondary institutions, students who pass an HSE exam that is officially recognized by the issuing state are eligible for federal student aid (U.S. Department of Education, 2021).

The three exams assess the same subjects: math, science, social studies, and language arts (table 1).<sup>2</sup> The GED has a single language arts subject test that covers reading and writing, whereas the HiSET and the TASC have separate subject tests for reading and writing. All three exams have a written essay portion.

NJDOE used the TASC developer's suggested passing threshold and its own passing thresholds for the GED and HiSET until early 2020, when the New Jersey State Board of Education lowered the thresholds for the GED and HiSET to those suggested by the exam developers. NJDOE noted that New Jersey's passing thresholds for those two exams were higher than any other state's and highlighted the inequity of exam takers receiving a score with which they would pass the exam in another state but fail it in New Jersey. The change was applied retroactively: exam takers who had received a score above the developers' suggested passing threshold but below NJDOE's original threshold between 2014 and 2020 became eligible for an HSE credential.

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### Box 1. Key terms

**College and career readiness threshold.** The minimum score set by the developers of the GED and the High School Equivalency Test (HiSET) that indicates readiness for college coursework or various career paths. Meeting this threshold does not determine whether an HSE exam taker passes the exam.

**English learner students.** Students identified by the district as needing English language learner services.

**Ever passing.** Receiving a passing score on each subject test for a particular high school equivalency exam at least once across all exam dates in the data. Exam takers can attempt an exam or one of its subject tests multiple times.

**High school equivalency (HSE) exams.** Exams that provide an opportunity for individuals who did not complete high school to earn an alternative credential to a high school diploma that allows them to pursue further education, employment, or training.

**New Jersey Assessment of Skills and Knowledge.** A standardized test administered through 2013/14 to New Jersey public school students in grades 3–8 by the New Jersey Department of Education (NJDOE). It evaluates students' achievement in language arts, math, and science.

**NJDOE's original passing threshold.** The minimum passing score for each HSE exam that was set by NJDOE and in effect between 2014 and early 2020. The original passing threshold was 150 on each subject test for the GED, 9 on each subject test and 45 across all subject tests for the HiSET, and 500 on each subject test for the Test Assessing Secondary Completion (TASC).

**NJDOE's new passing threshold.** The minimum passing score suggested by the developers of the GED, the HiSET, and the TASC and adopted by NJDOE in early 2020 (and applied retroactively to all exams taken since 2014). The new passing threshold is 145 on each subject test for the GED, 8 on each subject test and 45 across all subject tests for the HiSET, and 500 on each subject test for the TASC.

**Passing on first attempt.** Receiving a passing score on each subject test for a particular HSE exam the first time the subject test is attempted. Because the exams are fairly long (7–9 hours), exam takers typically take them over multiple days. Individuals who take some but not all of the subject tests for a particular exam are considered to have failed on the first attempt.

**Students in special education.** Students who are eligible for special education and related services, such as students who are hearing impaired, autistic, cognitively impaired, communication impaired, emotionally disturbed, and so on.

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2. The exams are also similar in time allocation and available language and accessibility formats (Zinth, 2015). All three exams are offered in English and Spanish.

The GED and HiSET developers also suggest thresholds for college and career readiness. For both exams the threshold is higher than the score required to pass. For example, the HiSET developers suggest that exam takers who score 15 out of 20 are ready for college and careers, whereas exam takers who score 8 out of 20 are eligible for an HSE credential.

**Table 1. Subject tests and scoring for high school equivalency exams**

Characteristic	GED	High School Equivalency Test	Test Assessing Secondary Completion
Subject tests reported	<ul style="list-style-type: none"> <li>• Mathematical reasoning</li> <li>• Science</li> <li>• Social studies</li> <li>• Reasoning through language arts</li> </ul>	<ul style="list-style-type: none"> <li>• Math</li> <li>• Science</li> <li>• Social studies</li> <li>• Language arts: Reading</li> <li>• Language arts: Writing</li> </ul>	<ul style="list-style-type: none"> <li>• Math</li> <li>• Science</li> <li>• Social studies</li> <li>• Language arts: Reading</li> <li>• Language arts: Writing</li> </ul>
Range of scores (reported by subject test)	100–200	1–20	300–800
NJDOE’s original passing threshold	150	9	500
NJDOE’s new passing threshold (developer’s suggested passing threshold)	145	8	500
Developer’s suggested college and career readiness threshold	165	15	None

NJDOE is New Jersey Department of Education.

Note: NJDOE’s original passing threshold was in effect between 2014 and early 2020. NJDOE’s new passing threshold was implemented in early 2020 and applied retroactively (back to 2014). The new passing threshold is the same as the exam developers’ suggested passing threshold.

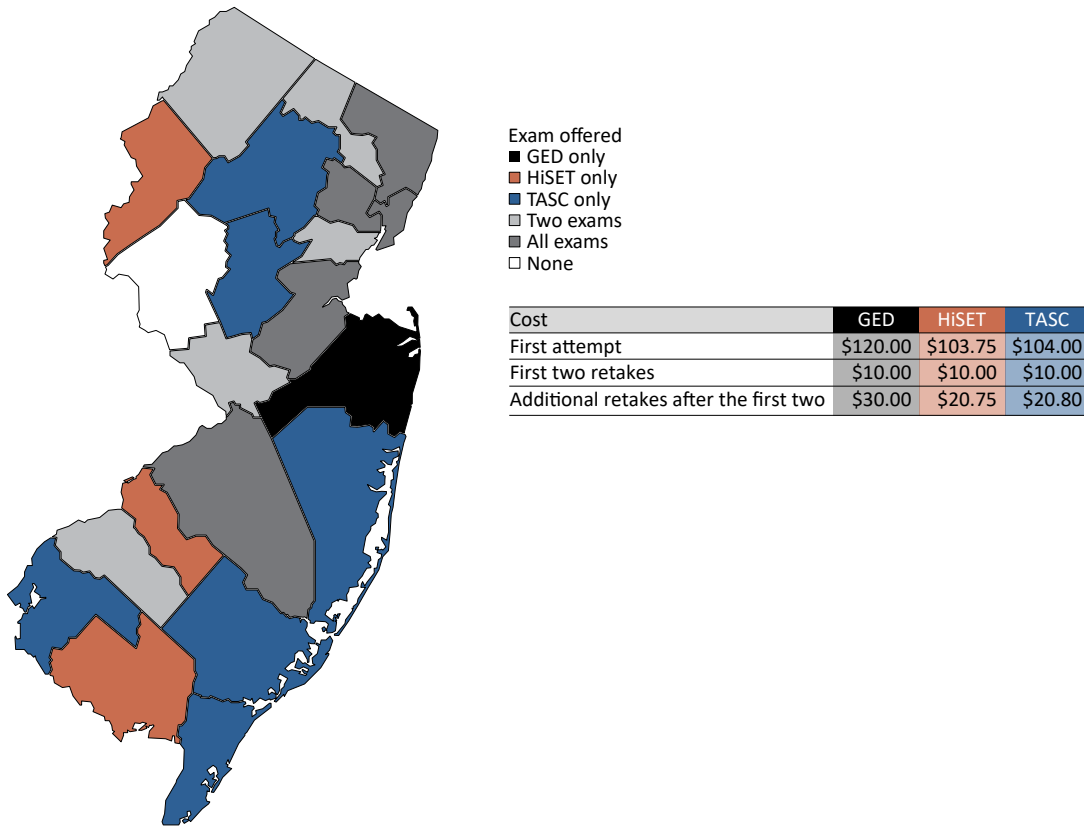
Source: Author’s compilation.

The accessibility of each exam varies across the state. Most counties do not offer all three exams, and fewer counties offer the GED and the HiSET than the TASC (map 1). Nearly half the testing centers in the state offer the TASC. Although the only requirement to take an HSE exam is to be a New Jersey resident, proximity to a testing center might affect the feasibility of getting to one. The exams also differ slightly in cost.

Because passing an HSE exam is often required for postsecondary training and employment programs, understanding the characteristics of exam takers and potential barriers to passing is valuable to supporting the outcomes of out-of-school youth and young adults. NJDOE wants to better understand the characteristics of exam takers and the patterns of their performance for the state’s three HSE options, including whether exam takers differ across exams by their demographic characteristics, their prior academic achievement, or whether they have attempted the exam multiple times. NJDOE is also interested in whether the performance of exam takers with similar grade 8 standardized test scores varies, and how the passing threshold affects passing rates for two of the exams.

NJDOE is particularly interested in HSE exam takers who were enrolled in the public school system between 2008/09 and 2013/14. These exam takers are more likely than older exam takers (those who were in grade 8 before 2008/09) to pass the HSE exams and more likely to enroll in a postsecondary degree program after passing an HSE exam (Garvey, 2011; Patterson et al., 2010). This suggests that passing an HSE exam might have a more substantial impact on the education trajectories of exam takers who were in school somewhat recently than on those of older exam takers. Focusing on exam takers who were in school somewhat recently also allows for more direct comparisons between exam takers and non-exam takers from the same grade 8 cohorts (that is, individuals who are approximately the same age and were enrolled in a New Jersey public school in grade 8). Such comparisons could enable NJDOE to better understand the characteristics of HSE exam takers in the context of their cohorts.

## Map 1. Accessibility of high school equivalency exams in New Jersey, 2020



HiSET is High School Equivalency Test. TASC is Test Assessing Secondary Completion.

Source: New Jersey Adult Education, 2020.

## Research questions

The study addressed three research questions about exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one HSE exam in New Jersey between March 2014 and December 2018:

1. What are the demographic characteristics of exam takers, how do these characteristics compare across exams, and how do these characteristics compare with those of non-exam takers from the same cohorts?
2. How did exam takers perform under the state's original passing thresholds, and how did that performance vary by demographic and academic characteristics?
  - a. How did passing rates change after NJDOE adopted the exam developers' suggested passing thresholds, and how would passing rates change if NJDOE used the developers' suggested college and career readiness thresholds as passing thresholds for the GED and HiSET?
3. How do passing rates of exam takers with similar prior academic performance compare across exams?

Box 2 summarizes the study's data sources, sample, and methods; appendix A provides more details.

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## Box 2. Data sources, sample, and methods

**Data sources.** This study used data from NJ SMART, the New Jersey Department of Education’s (NJDOE’s) statewide longitudinal education data system, and data collected by NJDOE from three high school equivalency (HSE) exam vendors. The NJ SMART data contained students’ demographic characteristics and standardized test scores (on the New Jersey Assessment of Skills and Knowledge) in grade 8. The data from the three HSE exam vendors contained the number of exam attempts, exam dates, scale scores, and pass indicators for each subject test of the GED, the High School Equivalency Test (HiSET), and the Test Assessing Secondary Completion (TASC).<sup>1</sup> Student records and exam vendor data were linked and deidentified by a third-party vendor prior to being provided to the study team.

**Sample.** The main sample consisted of exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one HSE exam in New Jersey between March 2014 and December 2018. Of the 33,701 exam takers who attempted an HSE exam in New Jersey between March 2014 and December 2018, 8,533 (about one-quarter) had been enrolled in a public school in the state between 2008/09 and 2013/14. The study team compared the main sample with all other students in the same grade 8 cohorts (2008/09–2013/14) in the state who did not attempt an HSE exam, regardless of whether they dropped out of high school ( $n = 994,723$ ). The study team also compared some characteristics of exam takers who attempted one of the three exams between 2014 and 2018 but were not matched to students in the NJ SMART data and who were thus not part of the main sample (see figure B1 and table B1 in appendix B). This group included exam takers who were too old to have been in grade 8 after 2008/09, exam takers who left school before grade 8, and exam takers whose grade 8 enrollment was outside New Jersey.

**Methodology.** The study team calculated descriptive statistics on HSE exam takers and their demographic and academic characteristics (research question 1) and used those descriptive statistics to examine passing rates, both overall and by demographic and academic characteristics, under the NJDOE’s original passing thresholds (in effect between 2014 and early 2020; research question 2). Developers’ suggested passing thresholds (which are the same as NJDOE’s new passing thresholds) and suggested college and career passing thresholds were used to analyze how passing rates would change under different passing thresholds (research question 2a).

Passing rates for each HSE exam by grade 8 standardized test score percentile are presented graphically, and the study team estimated the probability of passing each exam (after grade 8 standardized test scores were controlled for) using a linear probability model and logistic regressions (research question 3). The models estimated the probability of passing each of the three exams (the GED, the HiSET, and the TASC), with academic and demographic characteristics as explanatory variables.

The report does not discuss all statistically significant differences because the sample is large enough that many differences are statistically significant but not meaningful or large. All differences discussed in the report are statistically significant and meet a threshold of magnitude to be considered meaningful: 5 percentage points for dichotomous variables and 0.05 standard deviation for continuous outcomes.<sup>2</sup>

**Limitations.** This study has four primary limitations. First, the main sample includes about one-quarter of HSE exam takers in New Jersey between 2014 and 2018, so the findings might not hold for exam takers who were in grade 8 before 2008/09 (that is, older exam takers), who were never in grade 8 in New Jersey, or who attempted an HSE exam before or after the study period. Second, the analysis provides descriptive statistics and correlational associations and should not be interpreted as causal estimates of the relationship between characteristics and exam outcomes. Third, differences in HSE exam performance after grade 8 standardized test scores were controlled for could reflect differences in experiences between grade 8 and when the exam was attempted rather than differences in difficulty or potential biases of each exam. Fourth, exam takers select into different exams for various reasons that are unlikely to have been captured in the available data, and differences in performance on the three exams might be partly attributable to that self-selection.

### Notes

1. Essay scores on the HSE exams were not included in the data.

2. Effects larger than 0.05 standard deviation are considered medium (0.05–0.20 standard deviation) or large (0.20 standard deviation or more; Kraft, 2019). The 5 percentage point difference has varying effect size equivalents (from around 0.1 standard deviation for characteristics present in about 50 percent of the sample to more than 0.25 standard deviation for very common or very rare characteristics) but provides a clearer standard for identifying meaningful differences in dichotomous characteristics than converting all percentage point differences to effect sizes.

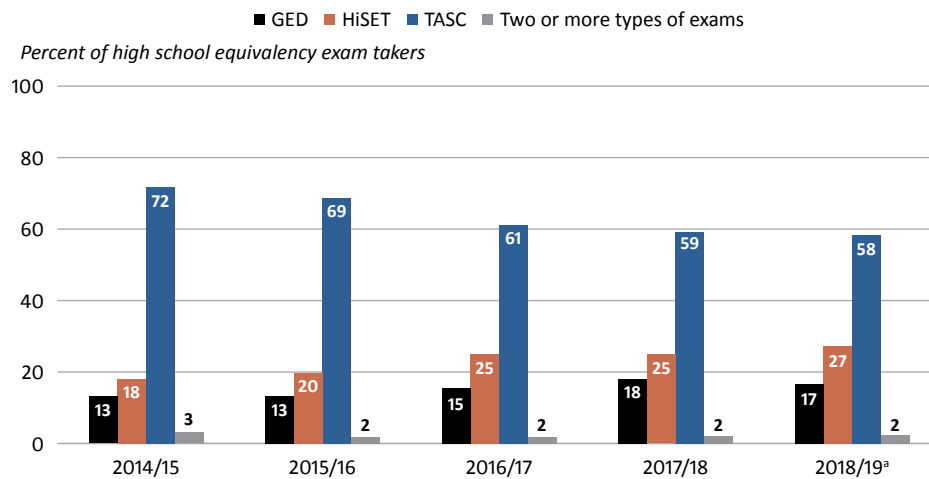
## Findings

### *Most high school equivalency exam takers in the study sample attempted the Test Assessing Secondary Completion, were eligible for the national school lunch program in grade 8, and identified as Black or Hispanic*

About 70 percent of exam takers in the study sample attempted the TASC in the 2014/15 and 2015/16 school years (figure 1; see also table B2 in appendix B). The percentage steadily declined to 58 percent in the 2018/19 school year.<sup>3</sup> The percentage of exam takers in the study sample who attempted the HiSET increased from 18 percent to 27 percent during the study period. The percentage of exam takers who attempted the GED each year remained more stable, at about 15 percent. About 2 percent of exam takers each year attempted multiple exams (typically the GED and the TASC). The general trends in exam takers attempting each exam were similar for exam takers outside the study sample (those who lacked grade 8 records; see table B1).

*HSE exam takers in the study sample completed fewer years of school, were more likely to have been eligible for the national school lunch program in grade 8, and were more likely to have identified as Hispanic or Black than non-exam takers.* Compared with non-exam takers,<sup>4</sup> exam takers in the study sample completed one fewer year of school, were 29 percentage points more likely to have been eligible for the national school lunch program in grade 8, were 11–12 percentage points more likely to have identified as Hispanic or Black, were 7 percentage

**Figure 1. Most high school equivalency exam takers in the study sample attempted the TASC, but the percentage who attempted the HiSET increased between 2014/15 and 2018/19**



HiSET is High School Equivalency Test. TASC is Test Assessing Secondary Completion.

Note: This figure includes exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one high school equivalency exam in New Jersey between March 2014 and June 2018. Results for 2013/14 are excluded because data were available for only part of the school year (March–June 2014).

a. Includes data through December 31, 2018.

Source: Authors' analysis of data on high school equivalency exam performance collected by the New Jersey Department of Education from exam vendors.

3. Between 2014/15 and 2018/19, 1,950–2,400 students in the study sample (who were matched to NJ SMART data) took at least one HSE exam each year compared with 8,100–8,700 exam takers in New Jersey overall (which includes exam takers who were matched and exam takers who were not matched to students in the NJ SMART data; see figure B1 and tables B1 and B4 in appendix B). NJDOE was also interested in the number of exam takers in Newark Public School District and Camden City School District (see table B5).

4. Refers to the 994,723 individuals who had been grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and who did not take an HSE test, regardless of whether they dropped out of high school.

points less likely to have identified as Asian, and were 16 percentage points less likely to have identified as White (table 2). Exam takers in the study sample had also received lower scores on standardized tests in language arts literacy and math in grade 8: 70 percent of exam takers had performed in the bottom two quintiles compared with 40 percent of non-exam takers.

*GED takers in the study sample were more likely to have identified as White and less likely to have been eligible for the national school lunch program in grade 8 than HiSET and TASC takers.* Compared with HiSET and TASC takers, GED takers in the study sample were more likely to have identified as White, had completed slightly more years of school, and had received higher grade 8 standardized test scores (see table 2). HiSET takers in the study sample were more likely to have identified as Hispanic than GED or TASC takers, and TASC takers in the study sample were more likely to have identified as Black than GED or HiSET takers. Compared with GED takers, HiSET takers in the study sample were 22 percentage points more likely to have been eligible for the national school lunch program in grade 8, and TASC takers in the study sample were 16 percentage points more likely.

Some of these differences may be due to exam accessibility. Although counties can offer multiple exam types, counties offering the GED had a substantially higher percentage of students who identified as White, a lower percentage of students who were eligible for the national school lunch program, and higher average grade 8 standardized test scores than counties offering the HiSET and the TASC (see table B3 in appendix B). However, although counties offering the HiSET had a substantially larger share of students who identified as Black than counties that offered other exams, statewide most Black students taking an HSE took the TASC (see table 2).

**Table 2. Demographic and academic characteristics of high school equivalency exam takers in the study sample and non-exam takers in New Jersey from the same grade 8 cohorts**

Characteristic	Exam takers				Non-exam takers (n = 994,723)
	GED (n = 1,338)	HiSET (n = 1,831)	TASC (n = 5,478)	All exam takers (n = 8,533)	
Female (percent)	39.7 <sup>a</sup>	43.7	44.7	43.8	48.7
Asian (percent)	3.0 <sup>a</sup>	1.2 <sup>a</sup>	2.0 <sup>a</sup>	2.0 <sup>a</sup>	8.9
Black (percent)	21.9 <sup>a</sup>	25.8 <sup>a</sup>	31.5 <sup>a</sup>	28.7 <sup>a</sup>	16.9
Hispanic (percent)	30.1 <sup>a</sup>	38.4 <sup>a</sup>	30.1 <sup>a</sup>	31.7 <sup>a</sup>	20.3
White (percent)	47.3 <sup>a</sup>	36.4 <sup>a</sup>	38.7 <sup>a</sup>	39.8 <sup>a</sup>	55.5
Eligible for the national school lunch program in grade 8 (percent)	47.0 <sup>a</sup>	69.0 <sup>a</sup>	63.3 <sup>a</sup>	61.9 <sup>a</sup>	33.2
In special education in grade 8 (percent)	13.2	14.5	14.5	14.3	13.4
English learner student in grade 8 (percent)	1.0	2.7	1.9	2.0	2.7
Highest grade completed	10.8 <sup>a</sup>	10.6 <sup>a</sup>	10.6 <sup>a</sup>	10.6 <sup>a</sup>	11.6
<i>Grade 8 NJ ASK scale scores</i>					
Language arts literacy	211.3 <sup>a</sup>	201.8 <sup>a</sup>	203.6 <sup>a</sup>	204.7 <sup>a</sup>	219.7
Math	202.9 <sup>a</sup>	189.3 <sup>a</sup>	190.7 <sup>a</sup>	192.6 <sup>a</sup>	221.6
Score in bottom 2 quintiles (percent)	58.7 <sup>a</sup>	75.3 <sup>a</sup>	71.4 <sup>a</sup>	70.3 <sup>a</sup>	39.5

a. The difference between the indicated group and non-exam takers is meaningful (greater than 5 percentage points for binary variables or greater than 0.05 standard deviation for continuous variables).

HiSET is High School Equivalency Test. NJ ASK is New Jersey Assessment of Skills and Knowledge. TASC is Test Assessing Secondary Completion.

Note: Exam takers are individuals who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one high school equivalency exam in New Jersey between March 2014 and December 2018. Non-exam takers are individuals who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and did not attempt any high school equivalency exams in New Jersey between March 2014 and December 2018. Values for race/ethnicity categories do not sum to 100 because students could be identified by more than one race/ethnicity in the data.

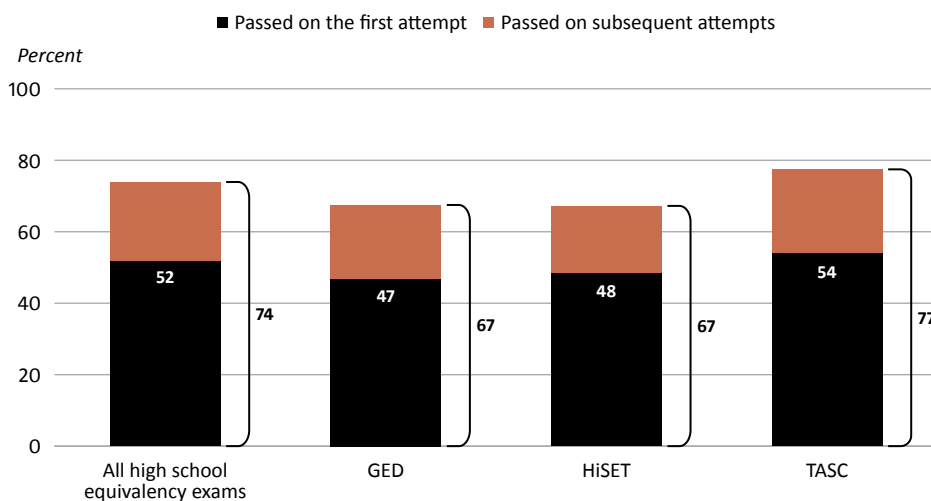
Source: Authors' analysis of data on student characteristics from NJ SMART (the New Jersey Department of Education's statewide longitudinal education data system) and data on high school equivalency exam performance collected by the New Jersey Department of Education from exam vendors.



***Under NJDOE’s original passing thresholds, about half of high school equivalency exam takers in the study sample passed on the first attempt, and exam takers were more likely to pass the Test Assessing Secondary Completion than the GED or the High School Equivalency Test***

Under NJDOE’s original passing thresholds, about 54 percent of TASC takers passed on the first attempt compared with 47–48 percent of GED and HiSET takers (figure 2). Most exam takers who failed on the first attempt retook the exam, although GED takers who failed were less likely to do so than HiSET and TASC takers who failed (56 percent versus 67 percent and 72 percent; see table B6 in appendix B). TASC takers who retook the exam were also more likely to ever pass (51 percent) than GED and HiSET takers (39 percent and 38 percent; see table B6). Under these passing thresholds, 77 percent of exam takers in the study sample ever passed the TASC (including retakes), and 67 percent ever passed the GED and the HiSET.

**Figure 2. Higher percentages of high school equivalency exam takers in the study sample passed the TASC than the HiSET or GED under NJDOE’s original passing thresholds, 2014–18**



HiSET is High School Equivalency Test. TASC is Test Assessing Secondary Completion.

Note: This figure includes exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one high school equivalency exam in New Jersey between March 2014 and December 2018. On average, GED takers attempted the GED 1.1 times, HiSET takers attempted the HiSET 1.5 times, and TASC takers attempted the TASC 1.5 times.

Source: Authors’ analysis of data on high school equivalency exam performance collected by the New Jersey Department of Education from exam vendors.

**Table 3. First-attempt passing rates and ever-passing rates on high school equivalency exams under NJDOE’s original passing thresholds, by demographic and academic characteristics, 2014–18 (percent)**

Characteristic	Passed on first attempt			Ever passed		
	GED (n = 1,338)	HiSET (n = 1,831)	TASC (n = 5,478)	GED (n = 1,338)	HiSET (n = 1,831)	TASC (n = 5,478)
Overall	46.8	48.3	54.0†	67.5	68.0	77.5†
Male	47.1	51.1	54.3†	65.8	70.8†	77.2†
Female	46.3	44.6	53.5†	70.1	64.4	77.8
Asian	72.5	71.4	75.5	90.0	71.4†	90.0
Black	36.9	31.1†	37.7	58.7	55.2	65.2†
Hispanic	37.2	40.9	46.8†	58.1	63.4†	75.1†
White	56.4	67.5†	71.2†	76.6	82.2†	88.0†
Eligible for the national school lunch program	35.8	42.0†	46.3†	58.0	63.1†	72.8†
In special education	25.0	30.3†	34.5†	41.3	47.2†	59.8†
English learner student	30.8	17.7†	24.8†	46.2	33.3†	52.4†

† The difference between the indicated group and GED takers is meaningful (greater than 5 percentage points).

HiSET is High School Equivalency Test. TASC is Test Assessing Secondary Completion.

Note: This table includes exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one HSE exam in New Jersey between March 2014 and December 2018.

Source: Authors’ analysis of data on student characteristics from NJ SMART (the New Jersey Department of Education’s statewide longitudinal education data system) and data on high school equivalency exam performance collected by the New Jersey Department of Education from exam vendors.

***Passing rates in the study sample varied by demographic and academic characteristics but ever-passing rates varied less than first-attempt passing rates***

*First-attempt passing rates varied by demographic and academic characteristics.* HSE exam takers in the study sample who identified as Hispanic or Black and exam takers who were eligible for the national school lunch program, in special education, or an English learner student in grade 8 passed each exam on the first attempt at a lower rate than the overall study sample (table 3). Exam takers who identified as White or Asian passed each exam on the first attempt at a higher rate than the overall study sample. All demographic groups in the study sample were more likely to pass the TASC than the HiSET on the first attempt (by 3–9 percentage points), and all exam takers except those who were English learner students in grade 8 were more likely to pass the TASC than the GED (by 1–15 percentage points). The demographic groups varied in whether they were more likely to pass the GED or the HiSET on the first attempt.

*Differences between demographic groups were smaller for ever-passing rates than for first-attempt passing rates.*

Differences in ever-passing rates also existed between most demographic and academic groups of interest and the overall sample of exam takers but were smaller than the differences in first-attempt passing rates for both the HiSET and the TASC (see table 3). All demographic groups were more likely to ever pass the TASC than the HiSET (by 6–19 percentage points), and all exam takers except those who identified as Asian were more likely to ever pass the TASC than the GED.

*Passing rates in the study sample were lowest for the math subject test on all three HSE exams.*

Under NJDOE’s original passing thresholds, 69–74 percent of HSE exam takers in the study sample passed the math subject test on the first attempt, and 80–85 percent ever passed it (table 4). Passing rates by subject test otherwise varied by exam. On the first attempt, GED takers were more likely to pass science and language arts than math and social studies, HiSET takers were more likely to pass science than math and social studies, and TASC takers were more likely to pass reading and social studies than math. HiSET retakers who passed increased their passing rate by

**Table 4. First-attempt passing rates and ever-passing rates on high school equivalency exams under NJDOE’s original passing thresholds, by subject test, 2014–18 (percent)**

Subject test	GED (n = 1,388)		HiSET (n = 1,831)		TASC (n = 5,478)	
	Passed on first attempt	Ever passed	Passed on first attempt	Ever passed	Passed on first attempt	Ever passed
Overall	46.8	67.5	48.3	68.0	54.0	77.5
Math	68.8	80.4	73.5	83.1	72.7	85.1
Language arts	76.8	84.8	na	na	na	na
Reading	na	na	76.5	84.6	86.0	92.9
Writing	na	na	78.2	86.7	80.9	91.3
Science	77.1	84.6	80.9	88.5	80.7	90.8
Social studies	70.2	81.9	74.3	84.4	84.7	92.5

HiSET is High School Equivalency Test. na is not applicable. TASC is Test Assessing Secondary Completion.

Note: This table includes exam takers who were enrolled as grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one subject test on a high school equivalency exam in New Jersey between March 2014 and December 2018. The GED has a single language arts subject test that covers reading and writing, and the HiSET and the TASC have separate subject tests for reading and writing.

Source: Authors’ analysis of data on high school equivalency exam performance collected by the New Jersey Department of Education from exam vendors.

8 percentage points or more on each subject, with social studies and math passing rates increasing the most. TASC retakers increased their passing rate by 7 percentage points or more on each subject, with math and writing passing rates increasing the most.

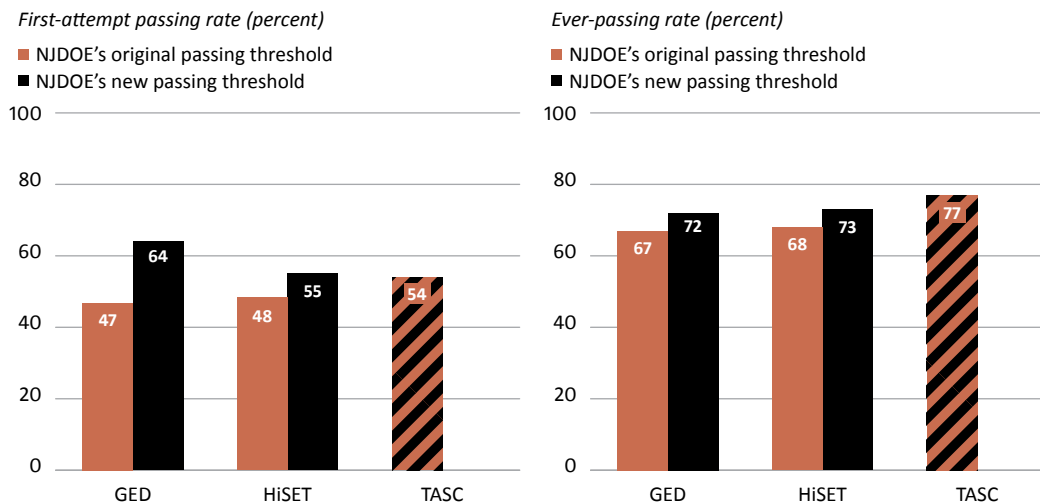
***Passing rates on the GED and the High School Equivalency Test increased under NJDOE’s new, lower passing thresholds; only a small percentage of exam takers earned scores that the exam developer suggested indicate college and career readiness***

*A substantially higher percentage of GED and HiSET takers passed the exams on the first attempt under NJDOE’s new passing thresholds than under the original thresholds.* For the GED the first-attempt passing rate increased by 17 percentage points higher under NJDOE’s new (retroactive) passing threshold (from 47 percent to 64 percent), and the ever-passing rate increased by 5 percentage points (from 67 percent to 72 percent; figure 3). For the HiSET the first-attempt passing rate increased by 7 percentage points under the new passing threshold (from 48 percent to 55 percent), and the ever-passing rate increased by 5 percentage points (from 68 percent to 73 percent).<sup>5</sup> Under the new passing thresholds the first-attempt passing rate was higher for the GED than for the HiSET and the TASC, and the differences in the ever-passing rate across the three exams were smaller.

*Only small percentages of exam takers in the study sample earned scores that the GED and HiSET developers suggested indicate college and career readiness.* Only about one-fifth of GED takers and one-third of HiSET takers ever reached those subject tests’ college and career readiness benchmarks, with only 13 percent of HiSET takers reaching the benchmark for its writing test (see table B7 in appendix B). If the college and career readiness threshold were adopted as the passing score for the overall exams, the ever-passing rate would be at least 61 percentage points lower for each GED subject test and at least 50 percentage points lower for each HiSET subject test.

5. Because NJDOE’s passing score did not change for the TASC, there is no difference for TASC takers.

**Figure 3. Passing rates on the GED and the HiSET were higher under NJDOE’s new passing thresholds than under the original thresholds, 2014–18**



HiSET is High School Equivalency Test. NJDOE is New Jersey Department of Education. TASC is Test Assessing Secondary Completion.

Note: This table includes exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one high school equivalency exam in New Jersey between March 2014 and December 2018. NJDOE's original passing threshold refers to the minimum passing score used between 2014 and early 2020; NJDOE's new passing threshold refers to the minimum passing score adopted in early 2020. For the GED and the HiSET the original passing threshold was higher than the exam developers' suggested passing threshold, and the new passing threshold is the same as the developers' suggested passing threshold. For the TASC the old passing threshold and the new passing threshold are both the same as the developer's suggested passing threshold.

Source: Authors' analysis of data on high school equivalency exam performance collected by NJDOE from exam vendors.

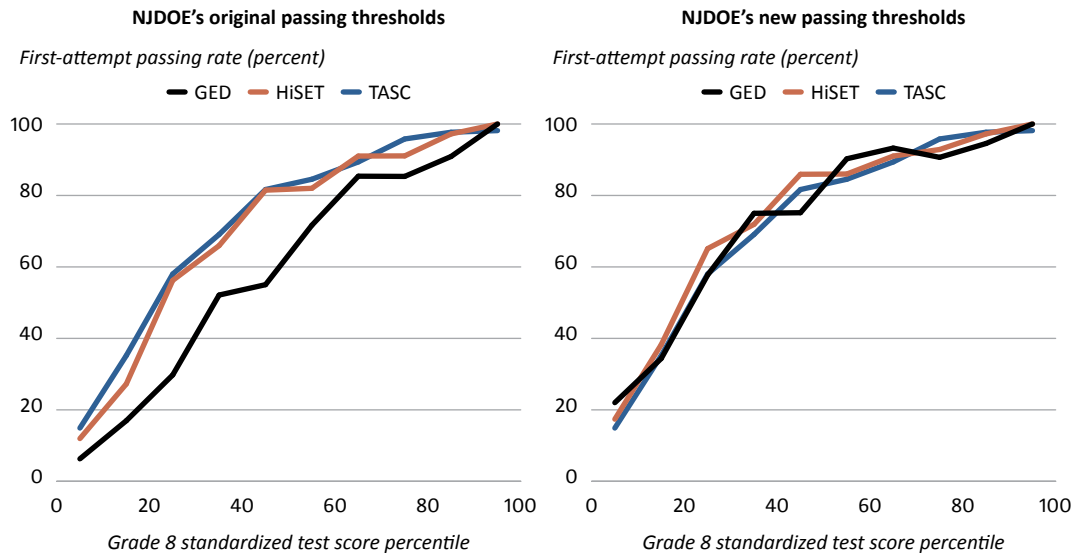
***Among high school equivalency exam takers with similar grade 8 standardized test scores, the first-attempt passing rate was lower for the GED than for the High School Equivalency Test and the Test Assessing Secondary Completion under NJDOE's original passing thresholds but was similar across the three exams under the new thresholds***

Among exam takers with similar grade 8 standardized test scores in the bottom 90 percent of the distribution (except TASC takers in the 60th–70th percentiles), the first-attempt passing rate was substantially lower for the GED than for the HiSET and the TASC under NJDOE's original passing thresholds (figure 4). The differences were largest (26–27 percentage points) for exam takers with grade 8 standardized test scores in the 40th–50th percentiles and smallest (0–10 percentage points) for exam takers with grade 8 standardized test scores in the 0–10th percentiles and 70th–100th percentiles. The first-attempt passing rate was similar for the HiSET and the TASC.

However, among all exam takers with similar grade 8 standardized test scores, the first-attempt passing rate was similar for the GED, the HiSET, and the TASC under NJDOE's new passing thresholds. The differences in the ever-passing rate for the three exams were also smaller under the new passing thresholds than under the original thresholds, although among exam takers with similar grade 8 standardized test scores in the bottom half of the distribution, the ever-passing rate was lower for the GED than for the HiSET or TASC (see figure B3 in appendix B). There are also strong associations between grade 8 standardized test scores and mean scores on the first attempt for all three HSE exams (see figure B4) and between grade 8 math, reading, and science scores and the first-attempt passing rate on the corresponding subject test for all three HSE exams (see figure B5).

*Following the change from NJDOE's original passing thresholds to the new thresholds, the difference in the first-attempt passing rate substantially decreased across the three exams, after grade 8 scores and demographic characteristics were controlled for.* Under the original passing thresholds, exam takers in the study sample were

**Figure 4. Among high school equivalency exam takers with similar grade 8 standardized test scores, the first-attempt passing rate was lower for the GED than for the HiSET and the TASC under NJDOE’s original passing thresholds but was similar across the three exams under the new thresholds, for high school equivalency exams taken between 2014 and 2018**



HiSET is High School Equivalency Test. NJDOE is New Jersey Department of Education. TASC is Test Assessing Secondary Completion.

Note: This figure includes exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one high school equivalency exam in New Jersey between March 2014 and December 2018. Grade 8 standardized test score percentile refers to performance on the New Jersey Assessment of Skills and Knowledge. See table B8 for the exact values.

Source: Authors’ analysis of grade 8 standardized test scores in reading and math from NJ SMART (NJDOE’s statewide longitudinal education data system) and data on high school equivalency exam performance collected by NJDOE from exam vendors.

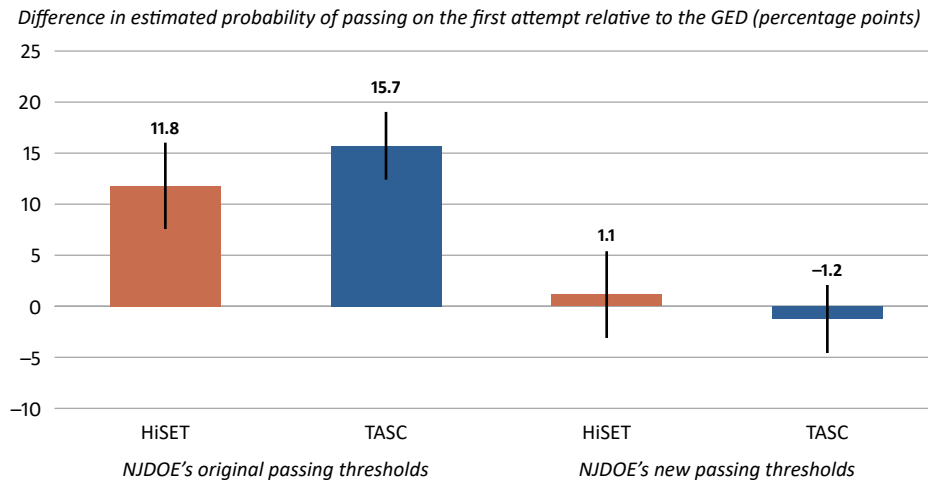
12–16 percentage points more likely to pass the HiSET and the TASC than the GED on the first attempt, after grade 8 scores and demographic characteristics were controlled for (figure 5).<sup>6</sup> However, under the new passing thresholds, the differences across exams declined to approximately 1 percentage point.

**Among high school equivalency exam takers with similar grade 8 standardized test scores, passing rates for the HiSET and the TASC varied by demographic group under both NJDOE’s original and new passing thresholds**

*Under NJDOE’s original and new passing thresholds, HiSET and TASC takers in the study sample who identified as Hispanic or Black or were eligible for the national school lunch program in grade 8 were less likely than other HSE takers to pass on the first attempt.* Under NJDOE’s original and new passing thresholds, exam takers who identified as Hispanic or Black or were eligible for the national school lunch program in grade 8 were less likely than other exam takers to pass the HiSET or the TASC, even when they had similar grade 8 standardized test scores (see figures B6 and B7 in appendix B). The differences persisted after grade 8 standardized test scores and other demographic characteristics were controlled for (see tables B13 and B14). The differences between groups were generally smaller for GED takers. Exam takers who were English learner students in grade 8 were less likely than other exam takers to pass the HiSET and the TASC, after grade 8 standardized test scores were controlled for.

6. Under the original passing scores first-attempt passing rates that did not control for grade 8 scores and student characteristics were similar across the three exams. However, GED takers were less likely than HiSET and TASC takers with similar grade 8 scores to pass.

**Figure 5. Among high school equivalency exam takers with similar grade 8 standardized test scores and demographic characteristics, the first-attempt passing rate was substantially higher for the HiSET and the TASC than for the GED under NJDOE’s original passing thresholds but was similar across all three exams under the new thresholds, for high school equivalency exams taken from between 2014 to and 2018**



HiSET is High School Equivalency Test. NJDOE is New Jersey Department of Education. TASC is Test Assessing Secondary Completion.

Note: This figure includes exam takers who were grade 8 students in a New Jersey public school between 2008/09 and 2013/14 and attempted at least one high school equivalency exam in New Jersey between March 2014 and December 2018. The values shown are the coefficients from a linear probability model in which the GED is the reference category (see tables B9 and B11 in appendix B and tables B10 and B12 for results from similar models using logistic regression). The model controls for grade 8 standardized test scores, race/ethnicity, eligibility for the national school lunch program, English learner status, highest grade completed, and the district in which the student was enrolled in grade 8. The mean passing rate for the GED is 47 percent under NJDOE’s original passing threshold and 64 percent under NJDOE’s new passing threshold. The vertical black lines indicate the 95 percent confidence interval of the estimate.

Source: Authors’ analysis of data on high school equivalency exam performance collected by NJDOE from exam vendors.

## Limitations

This study has four primary limitations. First, the study sample includes about one-quarter of HSE exam takers in New Jersey between 2014 and 2018. The findings might not hold for exam takers who were in grade 8 before 2008/09 (that is, older exam takers), who were never in grade 8 in New Jersey, or who attempted an HSE exam before or after the study period. Second, the analysis provides descriptive statistics and correlational associations and should not be interpreted as causal estimates of the relationship between characteristics and exam outcomes. Third, differences in HSE exam performance after grade 8 standardized test scores were controlled for could reflect differences in experiences between grade 8 and when the exam was attempted rather than differences in the difficulty or potential biases of each exam. Fourth, exam takers select different exams for various reasons that are unlikely to have been captured in the available data, and differences in performance on the three exams might be partly attributable to that self-selection. The study controls for some of these differences (such as grade 8 standardized test scores) but cannot control for all differences (for example, if students who intend to pursue higher education are more likely to take one exam than another).

## Implications

Most exam takers in the sample of recent New Jersey public school students attempted the TASC, perhaps as a result of its greater availability relative to the GED and HiSET and slightly lower price and lower passing threshold relative to the GED. Of the 21 counties in New Jersey, 15 offer the TASC, and 6 of those do not offer the GED or the HiSET. The HiSET and the TASC cost slightly less than the GED for first-time exam takers (\$104 for the HiSET and the TASC compared with \$120 for the GED). Exam takers might also have been more likely to attempt the TASC

than the GED because they were more likely to pass under NJDOE's original passing thresholds. Further research would be needed to investigate this hypothesis.

HSE exam takers differed in academic and demographic characteristics from non-exam takers in the same grade 8 cohorts in New Jersey public schools. Exam takers were more likely than non-exam takers to have received lower grade 8 standardized test scores, to have been eligible for the national school lunch program in grade 8, and to have identified as Black or Hispanic. GED takers had completed more schooling and had received higher grade 8 standardized test scores than HiSET and TASC takers. Few exam takers met college and career readiness thresholds on the exams, suggesting that even those who pass an exam might require substantial support to continue in postsecondary education.

NJDOE's lowering of the passing thresholds for the GED and the HiSET increased the percentage of exam takers who passed and better aligned performance across the three exams. Under NJDOE's original passing thresholds, about half of HSE takers passed on the first attempt, two-thirds of GED and HiSET takers ever passed, and three-quarters of TASC takers ever passed. However, under NJDOE's new passing thresholds, two-thirds of GED takers passed on the first attempt, and three-quarters of exam takers across the three exams ever passed. Under the old threshold GED takers were substantially less likely to pass than HiSET and TASC takers, after grade 8 standardized test scores were controlled for. However, under the new threshold GED takers were equally likely to pass compared with HiSET and TASC takers. Assuming that the state would favor similar passing rates for exam takers with equal preparation, this finding supports the decision to use the exam developers' suggested passing thresholds. Further evidence on the predictive validity of the three exams that is based on postsecondary education or workforce data might help clarify whether the three exams provide equally valid measures of academic skills.

HSE exam takers with similar grade 8 standardized test scores who identified as Black or Hispanic or were eligible for the national school lunch program in grade 8 were less likely than other exam takers to pass the HiSET and the TASC. These patterns held under both NJDOE's original and the new passing thresholds. Because this study does not describe patterns of high school experiences among exam takers, these findings cannot disentangle the possibility of exam bias from differences in high school experiences or out-of-school experiences between groups of exam takers or across the three exams. For example, the GED tended to be offered in districts with higher grade 8 standardized test scores and lower percentages of students who were eligible for the national school lunch program, so differences might be driven by the high schools that exam takers attended rather than by differences in the exams. Further research could use more detailed data on high school and out-of-school experiences to match similar exam takers' performance on the three exams and to characterize more adequately what barriers to passing exam takers experience before or while attempting the exams. In addition, while the three exam developers employ methods (including differential item functioning and independent content review) to mitigate potential sources of bias in individual items and the overall exams, the findings suggest exam developers should continue to examine item and exam statistics to identify potential barriers to test fairness (Data Recognition Corporation, 2016; Educational Testing Service, 2018; GED Test, 2018).

HSE takers were generally less likely to pass the math sections on all three HSE exams relative to other subjects. This finding suggests that exam takers were least prepared to succeed in math on these exams. New Jersey could explore options to expand math preparation for HSE takers.

## References

- Boesel, D., Alsalam, N., & Smith, T. M. (1998). *Educational and labor market performance of GED recipients*. U.S. Department of Education, Office of Educational Research and Improvement, National Library of Education.
- CareerOneStop. (n.d.). *State high school equivalency options*. Retrieved May 4, 2021, from <https://www.careeronestop.org/FindTraining/Types/State-HSE-Options.aspx>.
- Data Recognition Corporation. (2016). *TASC technical report*. [http://tasctest.com/Resources/TASC\\_Tech\\_Report.pdf](http://tasctest.com/Resources/TASC_Tech_Report.pdf).
- Educational Testing Service. (2018). *Hi-SET technical manual*. [https://hiset.ets.org/s/pdf/hiset\\_technical\\_manual.pdf](https://hiset.ets.org/s/pdf/hiset_technical_manual.pdf).
- Garvey, J. (2011). *From GED to college degree: Creating pathways to postsecondary success for high school dropouts*. Jobs for the Future. <https://eric.ed.gov/?id=ED519796>.
- GED Test. (2018). *GED technical manual: 2018 updated edition*. [https://ged.com/wp-content/uploads/GED\\_Technical\\_Manual.pdf](https://ged.com/wp-content/uploads/GED_Technical_Manual.pdf).
- Heckman, J. J., & Rubinstein, Y. (2001). The importance of noncognitive skills: Lessons from the GED testing program. *American Economic Review*, 91(2), 145–149.
- Kraft, M. (2019). *Interpreting effect sizes of education interventions* (EdWorkingPaper No. 19–10). Annenberg Institute, Brown University.
- New Jersey Adult Education. (2020). *Test centers*. Retrieved December 17, 2020, from <https://www.nj.gov/education/adulted/centers/>.
- Patterson, M. B., Zhang, J., Song, W., & Guison-Dowdy, A. (2010). *Crossing the bridge: GED credentials and postsecondary educational outcomes*. <https://eric.ed.gov/?id=ED509888>.
- Shaffer, B. (2015). *The changing landscape of high school equivalency in the U.S.: Options, issues, and improvement strategies*. Center for Postsecondary and Economic Success. Retrieved December 17, 2020, from <https://www.clasp.org/publications/report/brief/changing-landscape-high-school-equivalency-us-options-issues-and>.
- U.S. Department of Education. (2021). *Federal student aid handbook*. <https://fsapartners.ed.gov/sites/default/files/attachments/2020-07/2021FSAHbkVol1Master.pdf>.
- Zinth, J. (2015). *GED, HiSET, and TASC test: A comparison of high school equivalency assessments*. Education Commission of the States. <https://www.ecs.org/clearinghouse/01/20/38/12038.pdf>.

REL 2021–107

August 2021

This report was prepared for the Institute of Education Sciences (IES) under Contract ED-IES-17-C-0006 by the Regional Educational Laboratory Mid-Atlantic administered by Mathematica. The content of the publication does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

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Hartog, J., Fesler, L., & Tabora, B. (2021). *Characteristics and performance of high school equivalency exam takers in New Jersey* (REL 2021–107). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Mid-Atlantic. <http://ies.ed.gov/ncee/edlabs>.

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