Patterns and Trends in Educational Opportunity for Students in Juvenile Justice Schools

Updates and New Insights

By Hailly T.N. Korman, Max Marchitello, and Alexander Brand

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Executive Summary

We analyzed two years of the Civil Rights Data Collection (CRDC) to determine the quality of educational opportunities in juvenile justice facilities. We found:

1. In general, data about education in juvenile justice facilities are inconsistent and insufficient.

2. Across the states with adequate data, students in these facilities have far lower access than their peers in traditional schools to advanced math and science classes.

3. Students in juvenile justice facilities also spend fewer hours in class, are more often taught by uncertified teachers, and have insufficient access to credit recovery and dual enrollment programs.

Based on these findings, we recommend

1. The Office for Civil Rights (OCR) should work with states to develop a common definition of what constitutes a juvenile justice school.

2. OCR should expand the questions on the CRDC regarding the quality of education in juvenile justice facilities.

3. State policymakers should pay closer attention to these data and work to ensure students in juvenile justice can continue their education and meet state requirements.
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Context: About Juvenile Justice Education
Each state defines their own terms for juvenile justice education

For our analysis, we defined a **juvenile justice school** as a school located at or near a facility that houses youth who have been arrested or adjudicated and placed in secure or residential care by law enforcement or a court. These schools serve only students who are incarcerated and only during the term of their incarceration. They can be operated by a local school district, a public safety agency, a contracted provider, or state or county education agency.

*Not all states share this common definition, which can result in the reporting of incomplete, insufficient, or overly inclusive data. See Recommendations for more on policy ideas to remedy this.*

Other terms we use in this study:

**Dual Enrollment:** A program that enrolls students in college courses for college credit while still in high school.

**Credit Recovery:** A program that offers students who failed a course an alternative opportunity to retake the class for academic credit.

**Instructional Week:** We assume a typical 6 hours of instruction per day, or 30 hours per week.
Juvenile justice schools are not accountable for results

“In an emerging era of ‘big data,’ the students and the juvenile justice schools they attend operate essentially as off-the-book enterprises where standard public reporting and common rubrics of educational assessment do not apply.”

“Just Learning”
Southern Education Foundation, 2014

Nothing has changed.

- There is still no single dataset that captures education assessment data in students in juvenile justice facilities across states
- Within individual states, there are irregular efforts to assess student achievement in justice facilities
- And some states do not regularly collect or report student achievement data in any standardized way
The Data Collection Process
2013-14 and 2015-16
The Office for Civil Rights (OCR) collects academic and civil rights data from all public schools.

Office for Civil Rights

- Every other school year, the Office for Civil Rights (OCR), a sub-agency of the U.S. Department of Education, collects data on civil rights and academics from all public schools as part of the Civil Rights Data Collection.

Civil Rights Data Collection

- Academic data include school characteristics, enrollment, courses offered, and subject-specific enrollment.
- The analysis presented here uses data from the 2013-14 and the 2015-16 school years. The 2013-14 collection was the first to include data from juvenile justice schools.

With this data, we ought to be able to answer basic questions about enrollment and course offerings.
The CRDC has collected two years of data about education opportunities in juvenile justice schools

This deck includes information from Bellwether’s first analysis of education provided to adjudicated youth in the 2013-14 school year, and expands the analysis to include data and new analyses from the 2015-16 school year.

In both the 2013-14 and 2015-16 collections, we found:

1. Data about student experience and access to rigorous courses in juvenile justice schools are often incomplete or inaccurate.

2. Where analysis is possible, it shows that juvenile justice schools provide students less access to educational opportunity than traditional schools.

In the 2015-16 data we dug in more deeply, including looking into race-based inequities among students attending juvenile justice schools, teacher credentials, dual enrollment, and instructional hours.
Methodology
2013-14 and 2015-16
Data quality is so poor, we don’t know how many students were enrolled in a juvenile justice school.

We found that some OCR data is insufficient to draw even simple conclusions about enrollment.

For example, in 2013, the data in the OCR data collection indicate that some states had very few youth enrolled in a juvenile justice school.

- **South Carolina** reported 0 students enrolled in a juvenile justice school.
- **Arkansas** reported only 6 students enrolled in a juvenile justice school.
- **New Mexico** reported 100 students enrolled in a juvenile justice school.

These numbers are obviously suspect and cannot reasonably be taken as accurate counts of youth attending schools in secure placement in these states. To analyze the data responsibly, we developed a methodology to account for incompleteness and inaccuracy.
Despite poor-quality data, we were able to analyze them using a cross-referencing strategy.

Based on the OCR data alone, it is clear that many youth in juvenile justice facilities are not connected to enrollment data in any school, clouding any attempt at a 50-state analysis.

*To conduct a meaningful analysis of the quality of or access to education programs in juvenile justice facilities, we had to incorporate an additional data source.*

1. We identified a sample comprising those states in which the OCR enrollment data closely matched census data from another source: the Office of Juvenile Justice and Delinquency Prevention (+/- 30 percentage points).

2. We then analyzed those courses for which detailed enrollment data is available and compared that to the state’s traditional high schools.
Even then, in a majority of states, the reported number of youth in residential placement and enrolled students didn’t align.

Due to this misalignment, our analyses are limited to only the 18 states in 2013 and 15 states in 2015 that had a match rate between 70 and 130%, meaning that the numbers of students reported enrolled in school was *roughly* the same as the number of youth reported in custody at the facility.

Source: Student enrollment, Office for Civil Rights, Civil Rights Data Collection: 2013-14 and 2015-16. residential census head count, Office of Juvenile Justice and Delinquency Prevention
For many states, this misalignment cannot be explained fully by normal enrollment patterns

**Typical fluctuation in enrollment** explains a small portion of the mismatch

- Many youth are only incarcerated for a few weeks or months, so both statewide enrollment and number of youth in residential placement can fluctuate significantly during the school year.
- Because OCR and OJJDP collect their data on different days, this can have an impact on the ratio of enrolled students and youth in residential placement, possibly resulting in a misalignment of a few percentage points.

**But big discrepancies are probably due to inaccurate or incomplete data**

- There is evidence that some traditional schools are **mislabeled** as serving youth in residential placement.
- Some schools serving youth in residential placement are **missing** from the OCR database or are **mislabeled** as traditional schools.
- Instead of reporting how many students are enrolled on the **day of reporting** (a “snapshot”), some facilities **reported cumulative enrollment** (how many students were enrolled over the course of the entire year). In some facilities, cumulative enrollment is far greater than snapshot enrollment.
We compared access & enrollment for incarcerated youth to their peers: Students in traditional high schools

- What proportion of students go to a school that offers this class?
- What proportion of students at those schools enroll in this class?
- What proportion of the students who enroll go on to pass this class? (Data available for Algebra 1 only.)

This analysis only captures available course data for specific classes in a set of 18 sample states in 2013-14 and 15 states in 2015-16.
Findings From Two Years of Data: Math, science, and credit recovery 2013-14 and 2015-16
Juvenile justice schools struggle to provide critical educational opportunities to students who are incarcerated

Key findings from the two biannual datasets:

In 2013, only 18 states reported accurate data about student enrollment in juvenile justice schools. In 2015, only 15 states reported accurate data about student enrollment in juvenile justice schools.

Only 10 states reported accurate data in both years.

Students in juvenile justice schools have less access to higher-level math and science courses than their peers in traditional schools.

While students in traditional high schools pass Algebra 1 at consistently high rates, their peers in juvenile justice schools do not.

Despite higher need, students in juvenile justice schools have less access to credit recovery than their peers.
Access to math classes in juvenile justice facilities is far lower and varies much more than in traditional schools.

Non-weighted average of 18 sample states

20th and 80th percentile (60% of states)

Authors’ analysis of 2013-14 data. See slide 22 for a comparison with 2015-16 data.
Students in juvenile justice schools with access to math classes enroll in lower-level classes at higher rates.
Insufficient access to classes or enrolling in the wrong classes can hinder students’ chances of getting a diploma

But there are factors that might explain the variation in access to math classes across states

- Some states might not require facilities to offer a dedicated math class (or waive those requirements for smaller schools).
- Some states might not provide enough resources to offer certain math classes (i.e., small schools may lack teachers with higher-level math skills).
- Facilities might offer only a mixed-level math class for all students, and reporting procedures obscure details about individual enrollment.
- Because many students are below grade level, facilities might not have the need to offer higher-level math classes.
- Instead of offering discrete higher-level classes, mixed-level math classes may be reported as Algebra 1.

As well as the decrease in access to higher-level math classes

- Regardless of age and course history, all students who have not yet completed an Algebra 1 course would likely be reenrolled.
- Students might be mislabeled and enrolled in a class below their ability.
- A reported Algebra 1 class might, in reality, be a mixed-level class.
- Students may be forced to reenroll in Algebra 1 even if they have previously passed the class.

Taken together, these factors point to four possible conclusions:
Algebra 1 pass rates in traditional schools are steadily high, pass rates for incarcerated youth vary greatly

These pass rates provide a snapshot of the percentage of enrolled students who passed Algebra 1, a common high school graduation requirement, in any grade, 7th through 12th. They are not cohort rates, and thus likely ignore students who left the school for any reason.

Authors’ analysis of 2013-14 data.
Variation in academic expectations can undermine students’ chances of succeeding in later coursework.

There are several plausible explanations for a wide variation in pass rates:

- **Differences in initial course assignment**
  - Students are inappropriately placed in Algebra I.
  - Variation in actual course content.

- **Differences in requirements for passing**
  - Different cut scores for passing, even using the same tools.
  - Different overall methodology (e.g., end-of-course exam vs. seat time requirements, etc.).
  - Varying rigor of assessment tools.

- **Differences in quality of instruction**
  - Inconsistent quality of curriculum.
  - Poor instructional quality.
  - Different levels of access to classroom materials.

But none of the explanations accounts for the differences in access between juvenile justice facilities and traditional schools — except for the inference that juvenile justice schools are more likely to have more of these attributes than traditional schools.
Incarcerated youth have less access to science courses than their peers (especially for higher-level courses)

Authors’ analysis of 2013-14 data. See slide 23 for a comparison with 2015-16 data.
When science classes are offered, youth in juvenile justice schools enroll at similar rates as their peers.
There are a number of potential reasons why youth in juvenile justice have insufficient access to lab science courses

- Some states may not require or provide the resources for facilities to offer lab science classes.

- Some facilities might not be able to accommodate a science classroom.

- Some facilities might prioritize safety and security and, as a result, prohibit the use of lab equipment.

Additional data could help identify the cause and impact of this lack of access to lab science classes.

- Facilities that do not offer a course could be asked to report why (e.g., lack of equipment, lack of demand, safety & security, etc.).

- Facilities could be asked to report the percentage of time dedicated to actual lab exposure over the duration of the course.
Detailed Analyses: Comparing 2013-14 and 2015-16
Analysis of 2015-16 data revealed similar disparities to the previous year in access to advanced math courses.

We compared 2013 and 2015 to identify trends in access to advanced math courses. There were only 10 states between the two collections with sufficiently accurate data to be included in the analysis.

The graph below compares the gap in access to an advanced math course between juvenile justice schools and traditional schools by CRDC survey year.
Analysis of 2015-16 data revealed similar disparities in access to advanced science courses

We compared 2013 and 2015 to identify trends in access to advanced science courses. There were only 10 states between the two collections with sufficiently accurate data to be included in the analysis.

The graph below compares the gap in access to an advanced science course between juvenile justice schools and traditional schools by CRDC survey year.

Differences in percent access between juvenile justice and traditional schools

- Biology: 2013: 25, 2015: 21
- Chemistry: 2013: 68, 2015: 74
- Physics: 2013: 75, 2015: 70
Youth in juvenile justice schools also typically have less access to credit recovery programs than their peers.
Additional data on credit recovery options in juvenile justice facilities could inform policy decisions to help more students graduate.

As a part of the Civil Rights Data Collection, juvenile justice facilities could be required to provide additional information about their credit recovery program. Important questions include:

- How many students took advantage of a credit recovery program* and for which courses?
- What type of credit recovery options are available? Are they considered high-quality?
- Of the credit recovery options offered and accessed, how many students pass?
- If no credit recovery options are offered, what is the reasoning for that decision?

Given the high academic needs of youth in juvenile justice schools¹ and evidence of prior low achievement, the reduced access to high-quality credit recovery options is especially troubling.

* The 2015 data do include information about the number of students who participated in at least one credit recovery course, but do not include course types or pass rates.

Detailed Analyses: Disaggregation by Race, Access to Dual Enrollment and Qualified Teachers, as well as Lost Instructional Time

2015-16
We delved more deeply into the experiences of students in juvenile justice facilities in the 2015-16 data collection.

**Disaggregated access to math and science courses by race (slides 34-37)**

- Analyzed access to advanced math and science courses for black, white, Hispanic, and Native students.
- Compared access between traditional and juvenile justice schools for these student subgroups.

**Additional analyses (slides 38-41)**

- Analyzed access to dual enrollment courses for youth in juvenile justice facilities and compared that with traditional schools.
- Compared the share of advanced math courses taught by certified math teachers between traditional and juvenile justice schools.
- Looked into how many hours students in juvenile justice schools typically spend in education programming, as well as their time enrolled in these schools.
This deeper analysis revealed additional disparities and other troubling trends

A closer analysis of the 2015-16 data reveals race-based disparities, lower access to certified math teachers, less time spent in educational programming, and lower access to dual enrollment:

Native students attend juvenile justice schools that are least likely to have access to advanced math and science courses.

In Algebra I, Geometry, and Algebra II, students in juvenile justice facilities have less access to certified math teachers than students in other schools.

The typical student in a juvenile justice school loses a day of instruction every week, spending an average of 24 rather than 30 hours per week in educational programming.

Students in juvenile justice schools have less access to dual enrollment compared with their peers.

But better data collection (and good analysis) could improve programs for all students in all states.
Detailed Analyses: Access to Math and Science Disaggregated by Race

2015-16
Native youth in juvenile justice facilities consistently have less access to coursework than their peers

On the whole, students of all races in juvenile justice have less access to courses than their peers of any other race in traditional schools.

AND

Controlling for school type, Native youth consistently have less access to courses than their black, Hispanic, and white juvenile justice school-enrolled peers.
Native youth in juvenile justice schools are least likely to have access to higher-level math courses

Authors’ analysis of the 2015-16 data
Native youth in juvenile justice schools are also least likely to have access to rigorous science courses.

Authors’ analysis of the 2015-16 data.
Detailed Analyses: Access to Dual Enrollment, Certified Math Teachers, and Instructional Time

2015-16
Youth in juvenile justice schools effectively have no access to college courses through dual enrollment.
Youth in juvenile justice schools have less access to certified math teachers compared with their peers.
Youth in juvenile justice schools lose an average of 4 instructional days during each month of incarceration.

Among the juvenile justice schools that provided data, youth in those schools are participating in an education program on average 24 hours per week.

Alarmingly, this amounts to a loss of 6 hours of instruction per week, and 4 days of instruction each month. The longer a student spends in a juvenile justice facility, the farther behind they fall.
Recommendations
Improve and expand the data collection on the educational experiences of students in juvenile justice facilities

1. Develop a common definition of a juvenile justice school

OCR should work with state education agencies to ensure that all schools and districts share an understanding of what constitutes a juvenile justice school. Moreover, OCR should clarify how to report on two common arrangements:

(1) the educational experiences in facilities that provide educational services to youth, but are not themselves classified as schools
(2) education programs that deliver education in facilities as just one part of a larger education program

2. Expand the questions on the CRDC regarding education in juvenile justice facilities

While an important tool, the CRDC could be expanded to better evaluate the education provided at juvenile justice schools. The CRDC should collect more and more nuanced data, including:

- The option to report mixed-level mathematics
- Justification from any facility serving high school students that does not offer Algebra I or biology
- Numbers of students not enrolled in any math or science class
- Pass requirements for Algebra I and biology
- Pass rates — and requirements — for other classes states require students by law to successfully complete
Education providers should use that data to improve programs for youth in juvenile justice facilities

A more complete and accurate picture of the quality of education provided to students in juvenile justice facilities will help policymakers set meaningful requirements and take steps to better serve these children. Policymakers should work to:

Expand access

- To provide students in juvenile justice facilities with at least an adequate education, states should increase their access to advanced math and science courses. Often, successfully completing these courses is required for high school graduation and admission to postsecondary education opportunities.
- States should expand access to high-quality credit recovery programs in juvenile justice facilities. Often, students in juvenile justice facilities are missing critical credits and need an opportunity to catch up.

Improve processes

- States should develop more effective data-sharing procedures and other processes to ensure students are enrolled in the appropriate courses in a juvenile justice facility.
- The requirements to pass courses in juvenile justice facilities should also be made more apparent.
Conclusion from last two CRDC surveys

We found three critical problems with the quality of education in juvenile justice facilities

1. **Poor data quality.** Simply put, data about students’ experiences in juvenile justice facilities is incomplete and often inaccurate.

2. **Insufficient access to advanced math and science classes.** On average, juvenile justice facilities only provide limited access to critical courses.

3. **Inadequate access to critical resources.** Students in juvenile justice spend fewer hours in educational programming, more often taught by unlicensed teachers, and cannot access credit recovery and other essential classes.

The consequences of the poor quality of education programming in juvenile justice facilities are severe. Most notably, it can be difficult for students who attend a juvenile justice facility, even for a short period, to amass the course credits necessary to graduate high school or to be eligible for many postsecondary opportunities.
For the future: An analysis of the 2017 dataset

OCR is in the process of refining the 2017 data collection. We hope to engage in a similar analysis with some important updates.

Key Questions & Considerations:

1. Are the 2017 data more complete and/or accurate than the 2013 and 2015 data? To what extent is a sample analysis still necessary in order to generate reliable conclusions?

2. Of states with sufficiently accurate juvenile justice data in the 2013 and 2015 datasets, are there comparably accurate 2017 data? If so, what growth or progress can we see?

3. Are there new survey questions that we can analyze? Do they bring us closer to developing a coherent picture of student achievement in juvenile justice facilities?

4. How do patterns in the newly required data about school discipline, transfers to alternative schools, and length of incarceration inform our understanding of educational opportunity for incarcerated youth?
In many states, student enrollment was not aligned to the number of incarcerated youth (see slide 13)

- The Office of Juvenile Justice and Delinquency Prevention (OJJDP), part of the U.S. Department of Justice, administers the census of youth in residential placement.
- The OJJDP census data and OCR enrollment data for 2013 should be roughly equal.
- But in many states, there were **stark differences in the number of enrolled students and youth incarcerated**.

In some states, only a fraction of youth in residential placement were reported as enrolled. In others, reported enrollment was many times greater than the number of incarcerated youth.

For example:

<table>
<thead>
<tr>
<th></th>
<th>South Carolina</th>
<th>Arkansas</th>
<th>Utah</th>
<th>Hawaii</th>
<th>Delaware</th>
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</thead>
<tbody>
<tr>
<td>Enrolled in school (OCR)</td>
<td>0</td>
<td>6</td>
<td>82</td>
<td>658</td>
<td>1495</td>
</tr>
<tr>
<td>Incarcerated (OJJDP)</td>
<td>672</td>
<td>681</td>
<td>612</td>
<td>78</td>
<td>159</td>
</tr>
<tr>
<td>Number enrolled in school out of number incarcerated</td>
<td>0%</td>
<td>1%</td>
<td>13%</td>
<td>831%</td>
<td>940%</td>
</tr>
</tbody>
</table>
How we calculated access and enrollment rates

• Example question: What share of students in juvenile justice schools had access to an Algebra 1 class in Alaska? At what rate did they enroll in Algebra 1?

7 out of 9 reporting juvenile justice schools offered at least one Algebra 1 class

196 students were enrolled in a school that offered an Algebra 1 class

208 students were enrolled in a juvenile justice school

196/208 = 94% Share of students with access to an Algebra 1 class

Of the 196 students, 59 students actually enrolled in an Algebra 1 class

59/196 = 30% Enrollment rate for Algebra 1
About the Authors

Hailly T.N. Korman is a senior associate partner at Bellwether Education Partners on the Policy and Evaluation team, where she supports justice agencies and their education partners as they work to craft practices that significantly improve outcomes for justice-involved students, and she advocates for systemic reforms that mitigate the institutional obstacles to providing high-quality education services to youth in secure schools. Hailly is a graduate of Brandeis University with a major in politics and minors in legal studies and education. She also holds a J.D. from UCLA School of Law, where she was a member of the Public Interest and Critical Race Studies programs and the Collegium of University Teaching Fellows.

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