



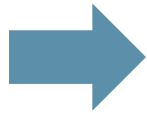
# Measuring Educational Opportunity in Juvenile Justice Schools

By Hailly T.N. Korman and Alexander Brand  
May 2018

# Executive Summary: Juvenile justice schools serve students who are incarcerated – and they are struggling

A **juvenile justice school** is a school located at or near a facility that houses young people 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.

## Key Findings:



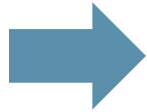
In 2013, only 18 states reported accurate data about student enrollment in these schools.



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.



But better data collection (and good analysis) could improve programs for all students in all states.

# Ordinary student achievement data is not regularly or consistently collected for juvenile justice schools

- There is no single data set 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.

*“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

# The Office for Civil Rights (OCR) collects academic and civil rights data from all public schools

## Office for Civil Rights

- Every two years, 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 includes school characteristics, enrollment, classes offered, and subject-specific enrollment.
- The analysis presented here uses data from the 2013-14 school year, the first set to include data from juvenile justice schools.

Based on this data, we ought to be able to answer a baseline question: **How many students were enrolled in a juvenile justice school in each state and in all states combined?**

# Yet this OCR enrollment data is insufficient to draw even simple conclusions

For example, in 2013, the data in the OCR data collection indicate that:

in Arkansas, only **six** youth were reported enrolled in a juvenile justice school



in South Carolina, **no** youth were reported enrolled in any juvenile justice schools



These numbers are obviously suspect and probably do not accurately represent all youth in residential placement in these states. We cannot responsibly analyze the data set without accounting for incompleteness and inaccuracy.

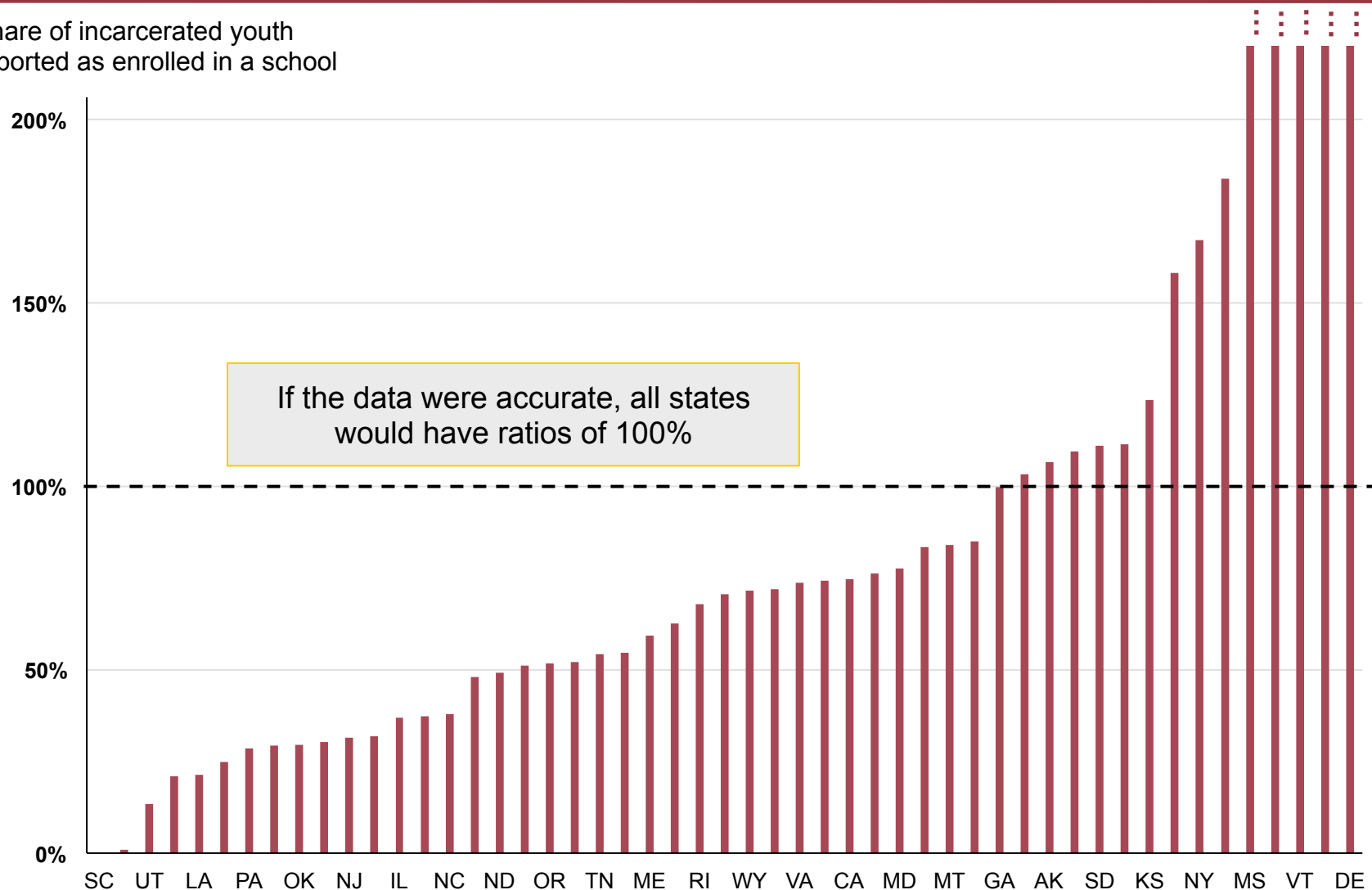
# This means that the 2013 OCR data, on its own, is insufficient

To identify the states where the data show a more complete picture, we cross-referenced the OCR data with another data set, the number of youth in residential placement (incarcerated youth) as recorded by an annual census conducted by the Office of Juvenile Justice and Delinquency Prevention (OJJDP)

With this comparison, we can understand the relationship between the **number of youth incarcerated** and **data about students** enrolled in juvenile justice schools

# In a majority of states, the reported number of youth in residential placement and enrolled students didn't align

Share of incarcerated youth reported as enrolled in a school



See Appendix A for alignment data for all states

# For many states, the misalignment cannot fully be explained by normal enrollment patterns

## There are two likely explanations for the misalignment:

1

### Normal 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.

2

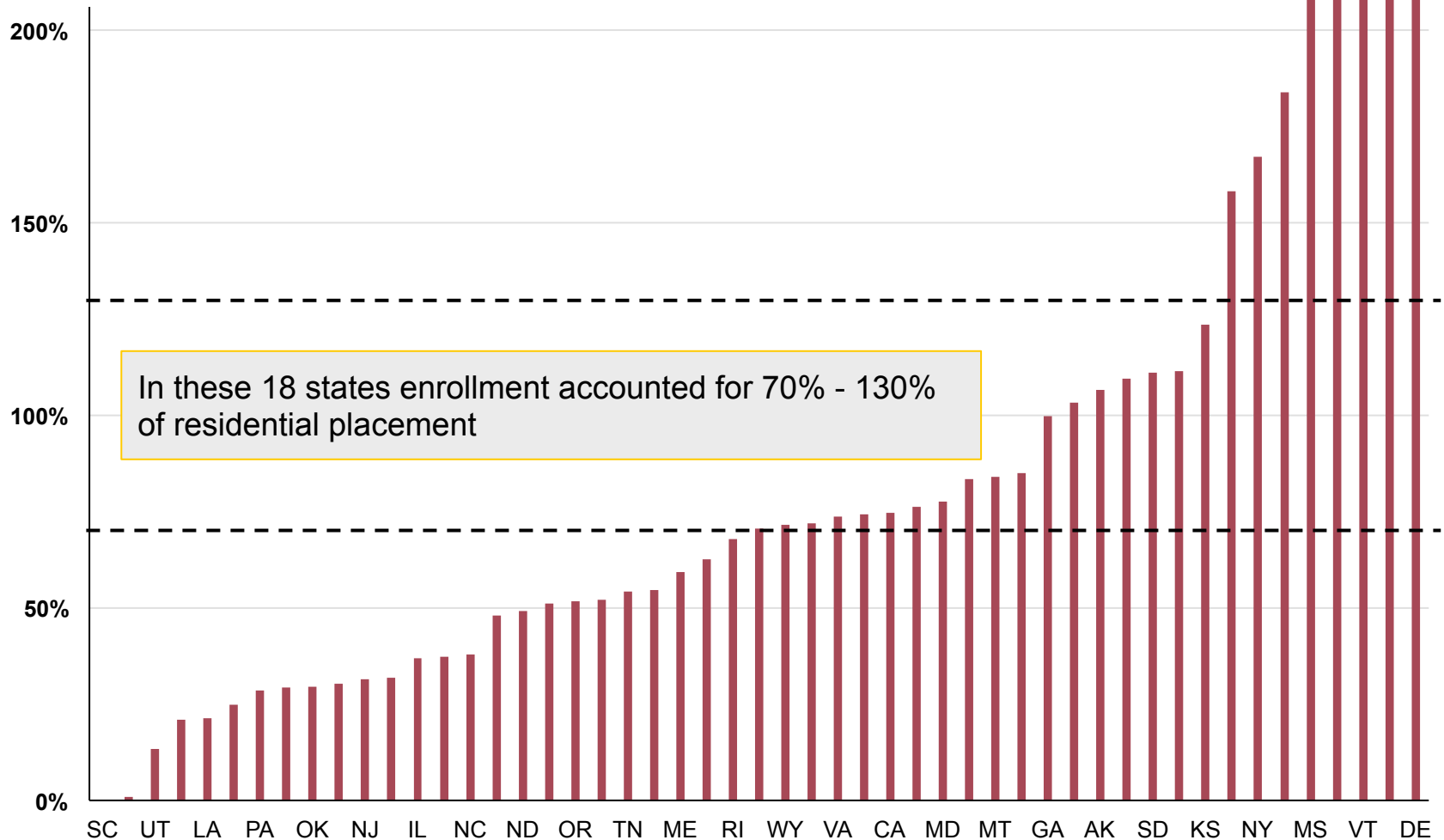
### But big discrepancies are probably due to inaccurate or incomplete data

- 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.



# Analyzing the states where the OCR & OJJDP data align best can give us some insight into education opportunity

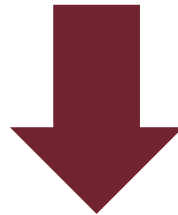
Share of incarcerated youth reported as enrolled in a school



# We created a methodology for analysis that uses only the most accurate and complete data

Based on this data, over 18,000 youth in residential placement are **not connected to enrollment data in any school**, clouding any attempt at a 50-state analysis.

*So how can we meaningfully analyze the quality of or access to education programs in juvenile justice facilities?*

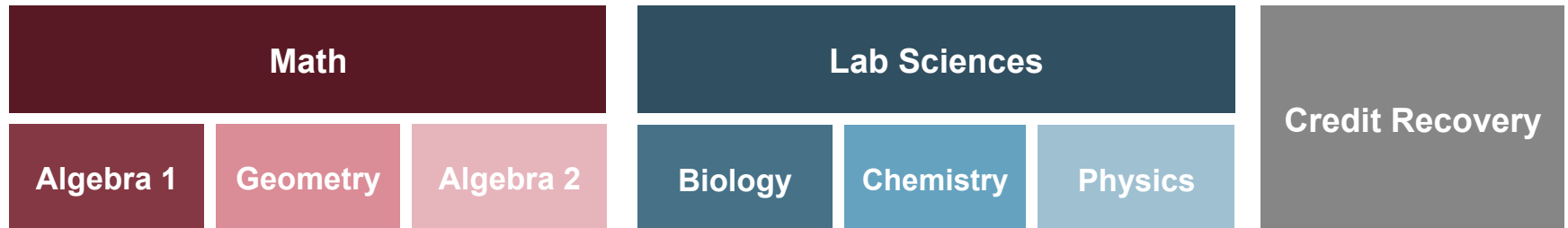


1. We drew a sample comprising those 18 states in which the OCR enrollment data closely matched the OJJDP census data (+/- 30 percentage points).
2. We then analyzed those courses for which detailed enrollment data is available — math and science — as well as credit recovery and compared that to the state's traditional high schools

# We compared access & enrollment for incarcerated youth to their peers: Students in traditional high schools

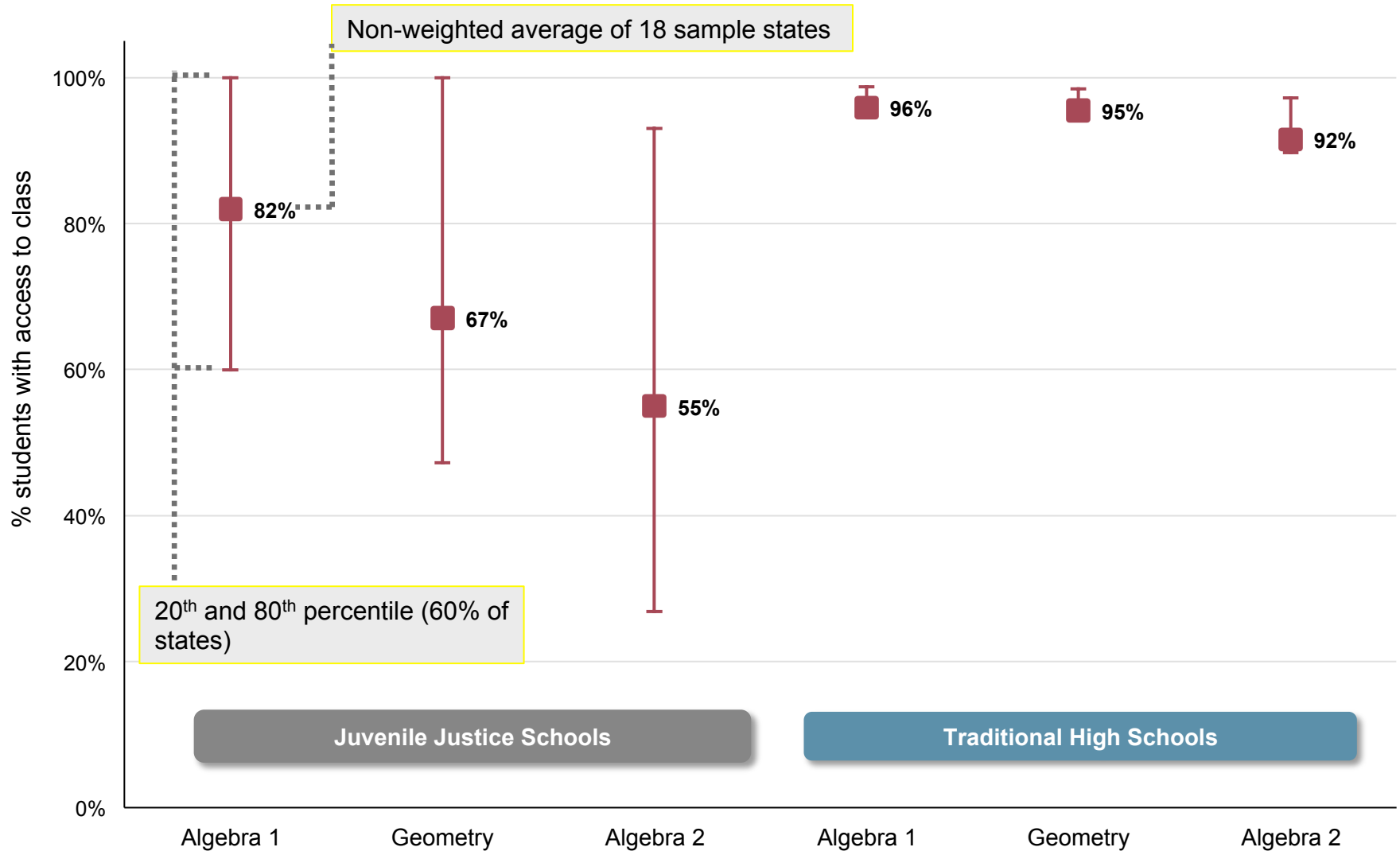
**This analysis only captures available course data for specific classes in a set of 18 sample states**

- 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.)



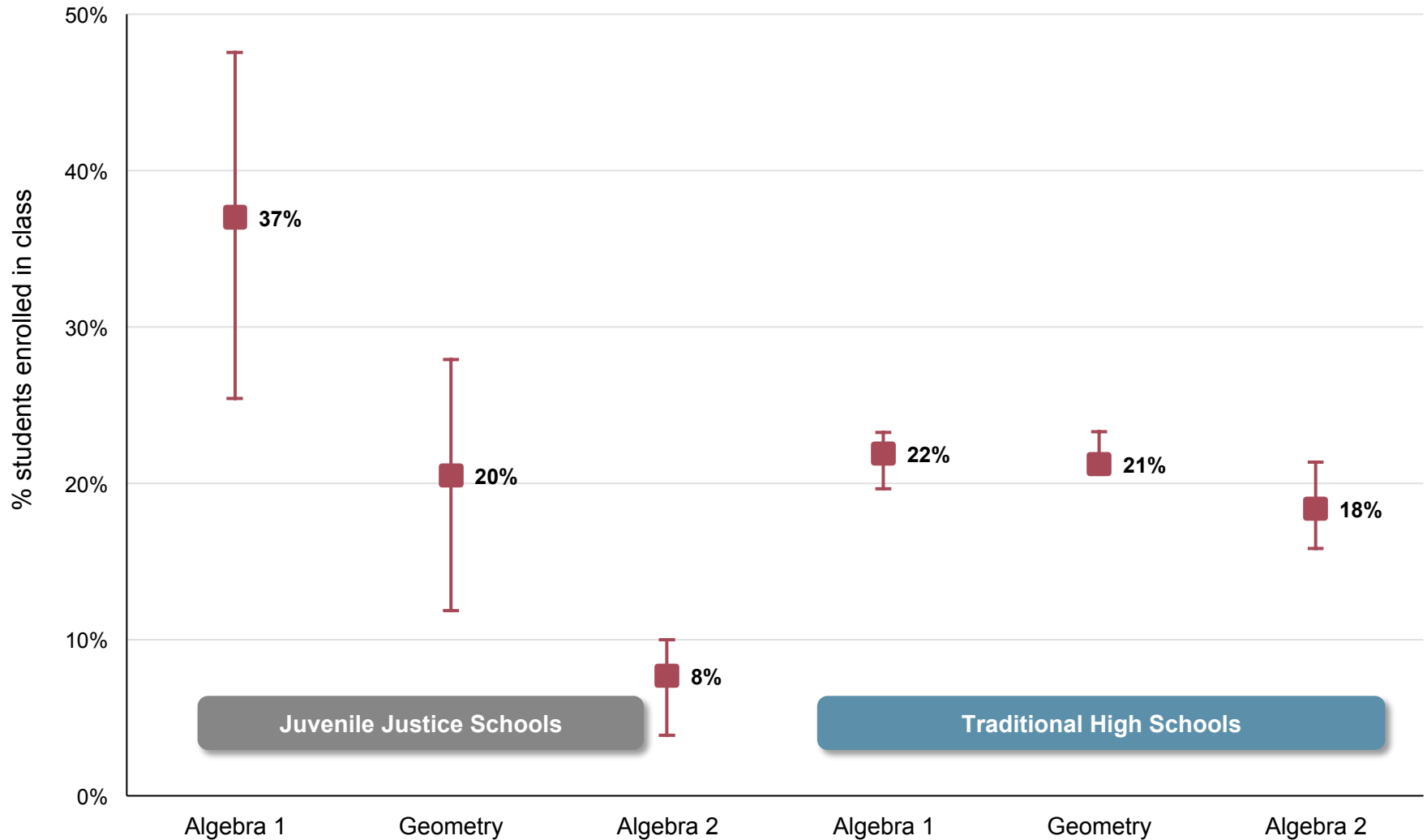
Traditional schools are those serving at least one 9<sup>th</sup> – 12<sup>th</sup> grader and not marked as a juvenile justice school

# Access to math classes for students in juvenile justice facilities varies significantly by state



See Appendix D for individual state data

# Students in juvenile justice schools with access to math classes enroll in lower-level classes at higher rates



See Appendix D for individual state data

# Not having access to or enrolling in the right 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

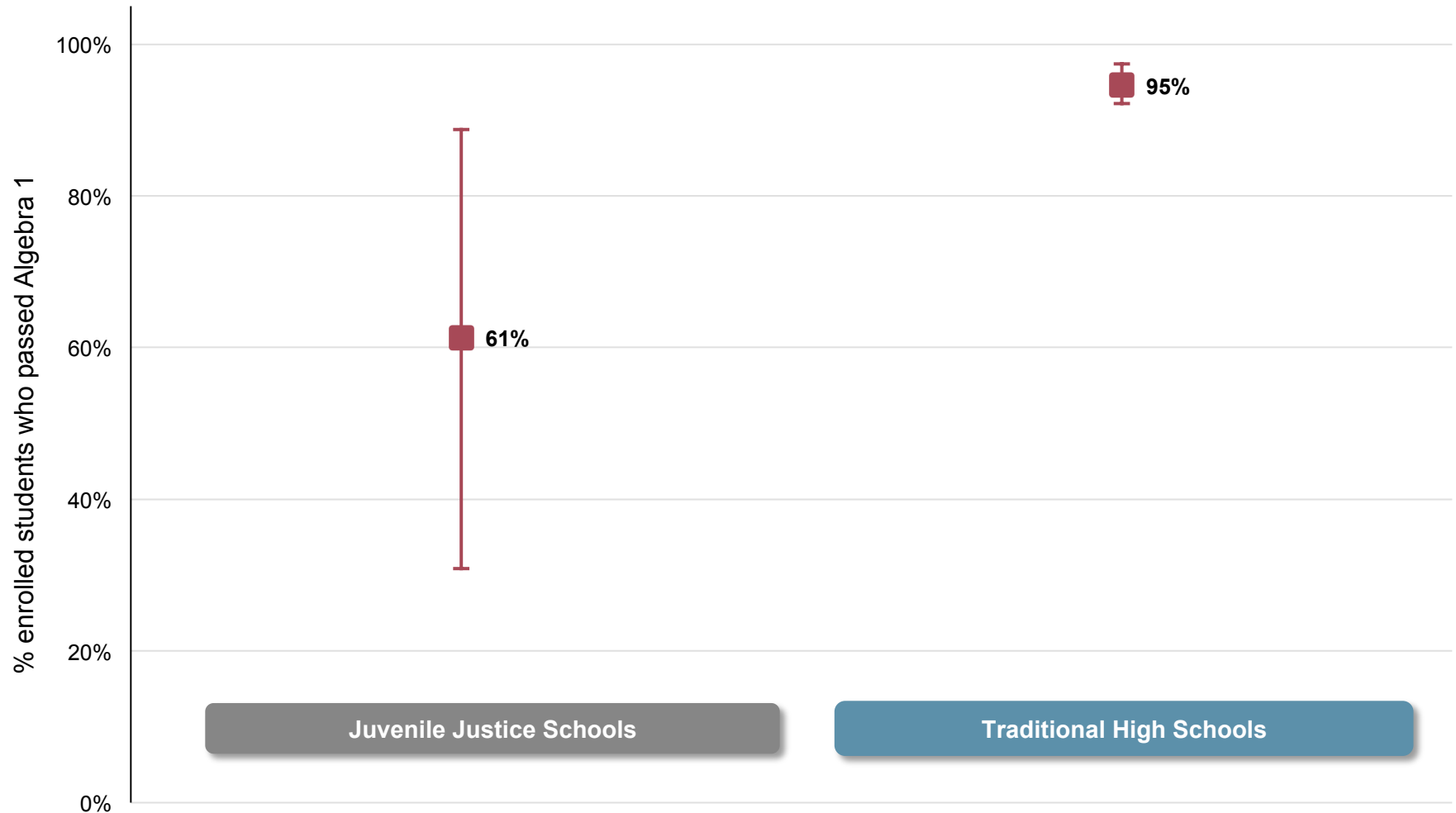
**As well as the decrease in access to higher-level math classes**

- 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

**Taken together, these factors point to four possible conclusions:**

- Despite their chronological age and course history, all students who have not yet completed an Algebra 1 course would likely be reenrolled
- Without high-quality pretesting, 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 might only have the option of enrolling in Algebra 1, even if they have previously passed the class

# While Algebra 1 pass rates in traditional schools are steadily high, pass rates for incarcerated youth vary greatly by state



See Appendix D for individual state 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 requirements for passing

Different overall methodology (e.g., end-of-course exam vs. seat time requirements, etc.)

Varying rigor of assessment tools

Different cut scores for passing, even using the same tools

## Differences in quality of instruction

Variance in quality of instructional delivery

Variance in quality of curriculum

Different levels of access to classroom materials

But none of the explanations accounts for the difference between juvenile justice facilities and traditional schools — except for the inference that **juvenile justice schools likely have more of these attributes than traditional schools.**



# Better OCR data collection could provide youth in juvenile justice facilities more access to appropriate math education

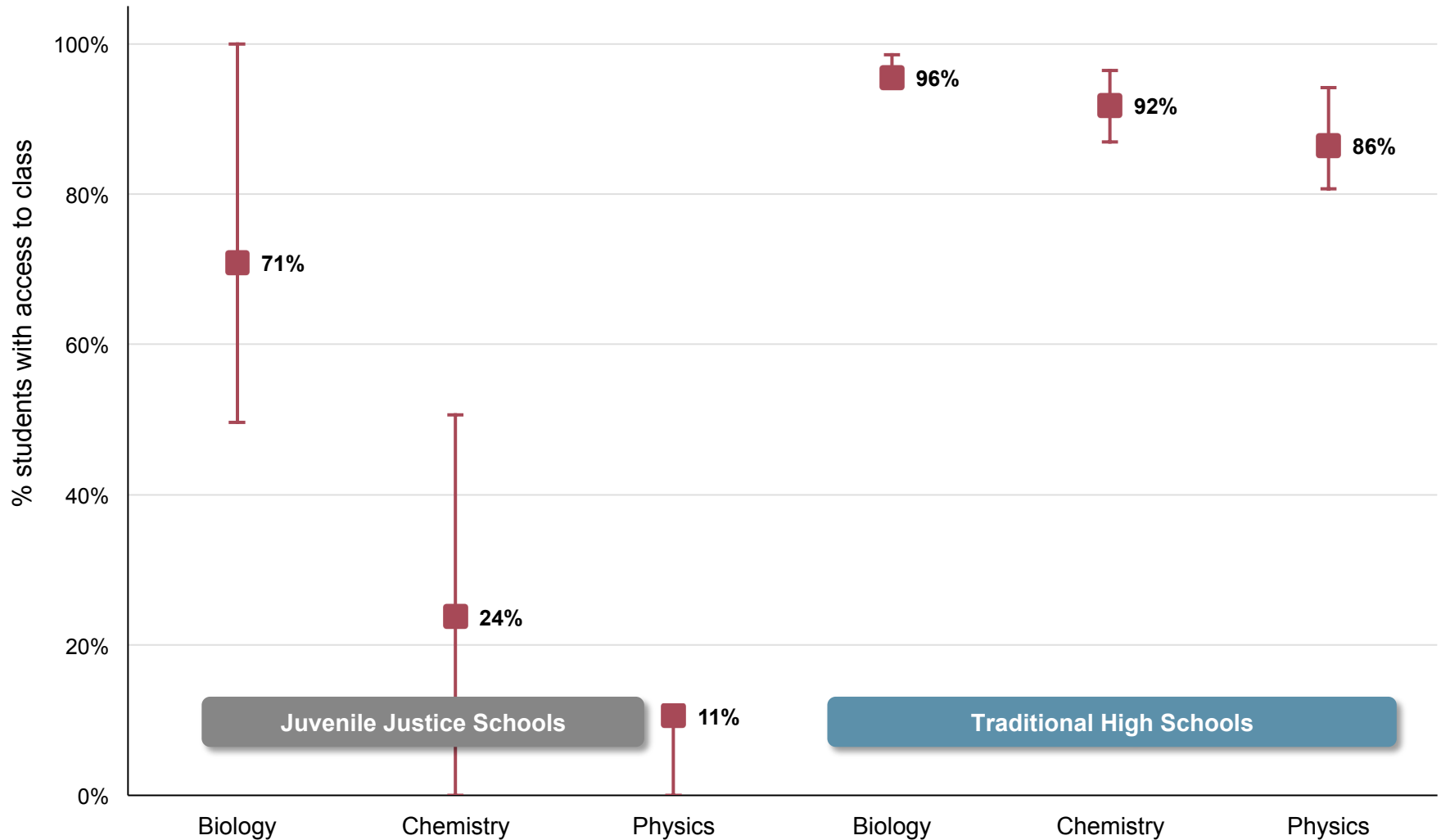
## OCR should collect more, and more nuanced, data

- Give facilities the option of reporting mixed-level math classes
- Require justification from any facility serving high school students that does not offer Algebra 1
- Collect data about numbers of students not enrolled in any math class
- Collect pass requirements for Algebra 1
- Collect pass rates — and requirements — for subjects other than Algebra 1

## Then education providers must use that data to improve programs for kids

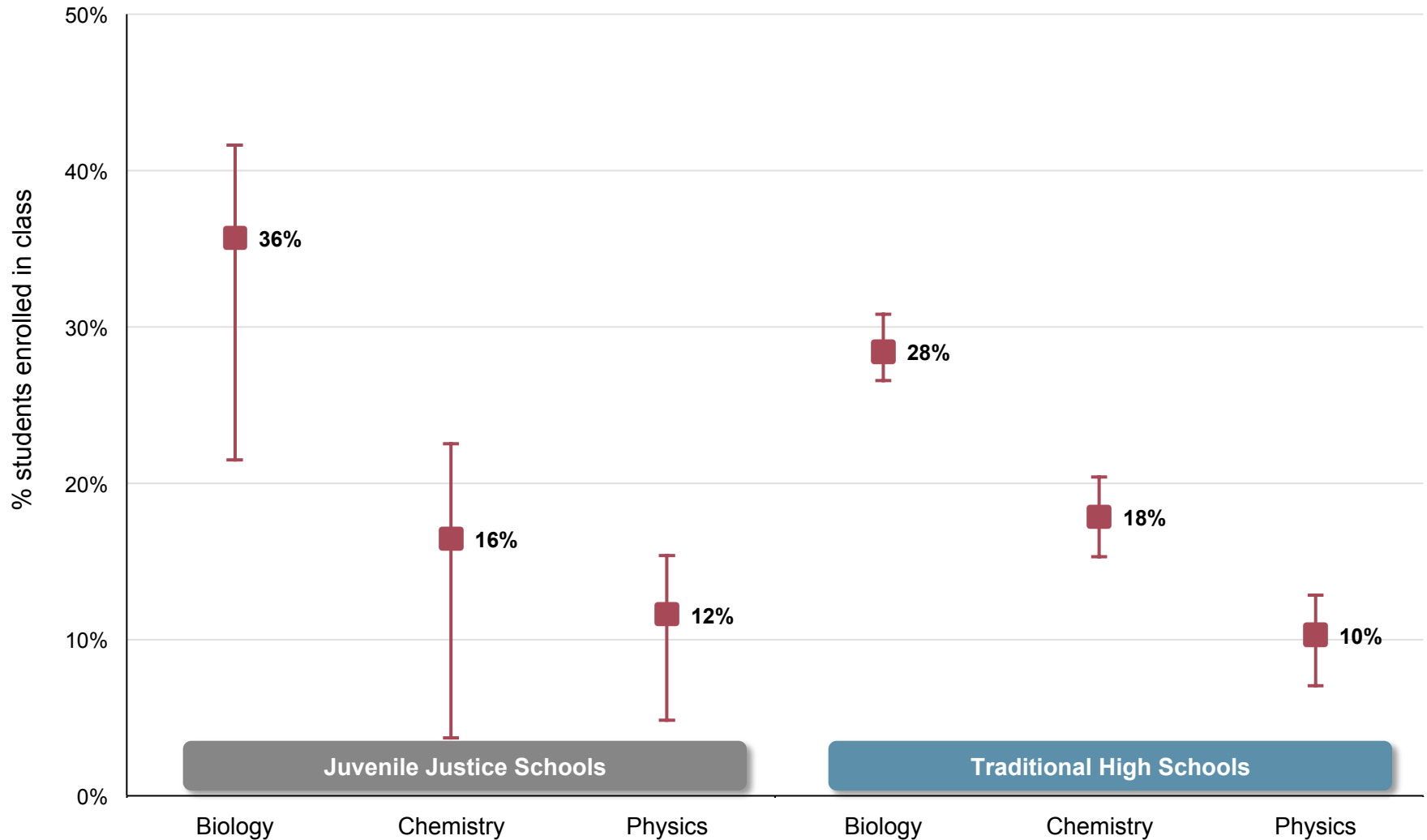
- A complete and accurate picture of the classes available will help policymakers set meaningful requirements for education providers to offer appropriate high school-level math classes in juvenile justice facilities
- If students are mistakenly enrolled in lower-level math classes, class assignment procedures can be improved
- More information about pass requirements can provide insights about both expectations and achievement across states

# Incarcerated youth have **less access** to science courses than their peers (especially for higher-level courses)



See Appendix E for individual state data

# When science classes are offered, youth in juvenile justice schools enroll in them **at similar rates** as their peers



See Appendix E for individual state data

# Restricted access to lab science classes can pose a challenge to on-time graduation

There are several potential explanations for the variation in access to lab sciences:

- Some states may **not require or provide the resources** for facilities to offer a lab science class
- Some state **universities might require** a lab science class for admission, prompting juvenile justice facilities to offer one
- 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 to identify the cause and impact of lack of access. For example:**

- 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

With better information about why certain classes aren't being offered, policymakers could set meaningful requirements around the inclusion of hands-on lab science classes in juvenile justice facilities.

# It appears that youth in residential placement typically have **less access** to credit recovery programs than their peers



See Appendix F for individual state data

# Youth in custody often need credit recovery programs the most, but appear to have **less access** to them

**Credit recovery programs** give students who have failed a class the chance to redo coursework through alternative pathways and earn academic credit

**Additional data on credit recovery options could inform better policy decisions to help more students graduate**



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 schools, the reduced access to 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.

# For the future: An analysis of the 2015 data set

OCR recently released the 2015 data. We will engage in a similar analysis with some important updates.

## Key Questions & Considerations:

1

Are the 2015 data **more complete and/or accurate** than the 2013 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 data set, is there comparably accurate 2015 data? If so, what **growth or progress** can we see?

3

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

4

How do the now-required 2015 data about **school discipline**, transfers to **alternative schools**, and **length of incarceration** inform our understanding of educational opportunity for incarcerated youth?

# Appendix



# Appendix A: Enrollment (OCR) / Residential placement (OJJDP) alignment for all states

State	OCR Enrollment	OJJDP Residential Placement	Alignment
SC	0	672	0%
AR	6	681	1%
UT	82	612	13%
OH	478	2283	21%
LA	165	774	21%
NM	100	402	25%
PA	795	2781	29%
CO	315	1077	29%
OK	153	519	29%
IN	478	1581	30%
NJ	279	888	31%
NV	188	591	32%
IL	597	1617	37%
MA	147	393	37%
NC	206	543	38%
NE	197	411	48%
ND	84	171	49%
MN	480	939	51%
OR	561	1086	52%
DC	119	228	52%
TN	361	666	54%
KY	423	774	55%
ME	96	162	59%
MI	1055	1683	63%
RI	108	159	68%
TX	3096	4383	71%

State	OCR Enrollment	OJJDP Residential Placement	Alignment
WY	118	165	72%
WI	587	816	72%
VA	1153	1563	74%
NH	58	78	74%
CA	6052	8094	75%
USA	40691	54148	75%
IA	561	735	76%
MD	599	771	78%
WA	847	1014	84%
MT	126	150	84%
CT	237	279	85%
GA	1554	1557	100%
FL	2896	2802	103%
AK	208	195	107%
WV	559	510	110%
SD	370	333	111%
AZ	984	882	112%
KS	1093	885	124%
ID	712	450	158%
NY	2757	1650	167%
MO	1937	1053	184%
MS	601	243	247%
AL	3833	933	411%
VT	137	27	507%
HI	648	78	831%
DE	1495	159	940%

# Appendix B: In many states, student enrollment was not aligned to the number of incarcerated youth

- 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:

Enrolled in school (OCR)	0	6	82	658	1495
Incarcerated (OJJDP)	672	681	612	78	159
Number enrolled in school out of number incarcerated	0%	1%	13%	831%	940%
	<b>South Carolina</b>	<b>Arkansas</b>	<b>Utah</b>	<b>Hawaii</b>	<b>Delaware</b>

# Appendix C: 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

Of the 196 students, **59** students actually enrolled in 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

$$59/196 = 30\%$$

Enrollment rate for Algebra 1

# Appendix D: Math pipeline; access and enrollment for well-aligned states

States	Alg1 Access	Geom Access	Alg2 Access	Alg1 Enrollment	Geom Enrollment	Alg2 Enrollment	Alg1 Pass Rate
AK	94%	63%	58%	30%	18%	8%	0%
AZ	89%	51%	50%	7%	14%	4%	28%
CA	93%	63%	29%	48%	8%	1%	62%
CT	52%	52%	52%	40%	33%	10%	100%
FL	83%	67%	50%	36%	17%	12%	60%
GA	95%	86%	0%	29%	11%	-	91%
IA	100%	100%	100%	59%	28%	2%	35%
KS	45%	95%	25%	46%	22%	9%	84%
MD	64%	45%	23%	58%	37%	15%	68%
MT	100%	0%	0%	39%	-	-	100%
NH	100%	100%	100%	47%	21%	7%	85%
SD	65%	56%	56%	67%	49%	5%	80%
TX	92%	90%	79%	47%	26%	7%	23%
VA	100%	100%	100%	23%	15%	10%	0%
WA	58%	36%	33%	18%	8%	5%	0%
WI	52%	3%	49%	13%	12%	1%	0%
WV	94%	100%	91%	30%	12%	10%	63%
WY	100%	100%	94%	30%	18%	17%	64%

# Appendix E: Lab sciences; access and enrollment for well-aligned states

States	Bio Access	Chem Access	Phys Access	Bio Enrollment	Chem Enrollment	Phys Enrollment
AK	60%	48%	0%	40%	4%	-
AZ	51%	22%	14%	12%	3%	3%
CA	43%	0%	3%	22%	-	12%
CT	52%	0%	0%	84%	-	-
FL	56%	12%	0%	24%	7%	-
GA	96%	31%	4%	32%	4%	3%
IA	100%	0%	100%	33%	-	12%
KS	81%	19%	0%	25%	5%	-
MD	35%	13%	3%	86%	75%	25%
MT	100%	0%	0%	24%	-	-
NH	100%	0%	0%	38%	-	-
SD	65%	56%	29%	67%	12%	10%
TX	93%	53%	39%	42%	23%	16%
VA	100%	100%	0%	33%	0%	-
WA	56%	0%	0%	21%	-	-
WI	49%	0%	0%	28%	-	-
WV	100%	8%	0%	15%	5%	-
WY	40%	66%	0%	15%	44%	-

# Appendix F: Credit recovery; access for well-aligned states

States	Access
AK	89%
AZ	48%
CA	49%
CT	100%
FL	0%
GA	0%
IA	48%
KS	19%
MD	9%
MT	3%
NH	100%
SD	9%
TX	25%
VA	60%
WA	25%
WI	40%
WV	54%
WY	100%

# About the Authors



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Hailly is a graduate of Brandeis University with a major in politics and minors in legal studies and education. She also holds a JD 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. She can be reached at [hailly.korman@bellwethereducation.org](mailto:hailly.korman@bellwethereducation.org)



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