# Efficacy of G-Level Courses in District 86

Board of Education September 30, 2021

#### **Context / Timeline of Course Levels in D86**

- Until 1997 G-level courses were offered in many core course areas
- In 1998 G-level courses were eliminated in English or Social Studies in D86 and the Academic Reading (AR) course was introduced and paired with English 1 for students with academic needs in reading
- In 2008, as part of NCLB's School Improvement Planning process, Hinsdale South began the transition to "AR" classes in English 2, English 3, World Cultures, GeoPhysics, Concepts in Chemistry, and Biology as Tier 2 intervention courses to support students with documented reading deficits.
- In 2017, Hinsdale South begun the transition away from these AR classes and also began phasing out Tier 2 math classes (Algebra 1 Part 1/Part 2), back to two levels paired with a structured FTE supported intervention program in the four core areas.
- In 2019, the Science Program Team proposed an aligned curriculum proposal that included the elimination of G level courses at Hinsdale Central
- In 2020 the Math Program Team proposed an aligned curriculum that established a Quantitative Reasoning Course that replaces Algebra 1 G at Hinsdale Central and ensures that students are enrolled in on grade level courses by the end of their freshman year

#### What are G-level classes and why have they existed?

- G Level stands for General Level and is an academic track originally designed for students who struggle in an academic content area.
- This track was designed for students performing below Regular or College Preparatory expectations
- Not designed as a self-contained special education class (self-contained classes also exist, however only for students with a qualifying IEP)
- Major topics are covered, but depth of content and skill standards are modified in order to facilitate a slower pace.
- Historically used as an intervention option.

How does the G-level curriculum compare to the Regular Track (college prep) curriculum with the same or similar title?

- Separate curriculum with modified content objectives OR modified curriculum spread over a longer period of time (two years)
- Historically, some G courses contained targeted reading interventions in place of subject area content - most notably in Science G courses. Students would access Achieve 3000 (individual, computer-based literacy acceleration program) during their science class.
- G-level curriculum in math is designed to prepare students for the next G-level course in the sequence as opposed to a regular level course.

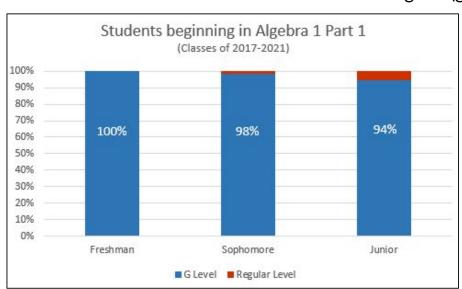
What resources (texts) are used in G-level classes and how do they compare to college prep courses with the same or similar title?

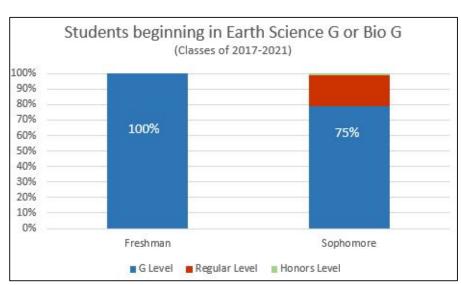
#### G Level texts:

- Biology G: Life iScience, Grade 7
- Earth Science G: Earth and Space iScience, Grade 6
- Algebra 1 Part 1/Part 2: Big Ideas Math: Algebra 1 Same Text -over two years
- Geometry G: Geometry: Common Core Same Text, Reduced Depth
- Alg 2 G: Big Ideas Math Algebra 2: Common Core Same text, Reduced
   Depth

#### Hinsdale Central - Data on Students Leaving G Level

Do students in the G-Level advance to regular (grade-level) classes or Honors classes?

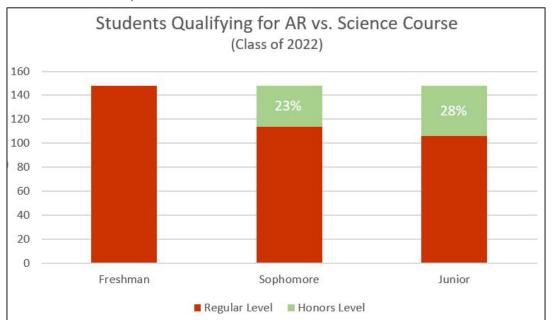




Conclusion: About 6% of students exit G-Level Math and 25% of students exit G-Level Science.

#### Hinsdale South - Science Program without G level

When no G-Level course exists, do students advance to Honors/AP courses in the content area?



Conclusion: All students start in regular level freshman class and by junior year 28% have advanced to an AP class (AP Biology)

Hinsdale South implemented a version of PCB more than a decade ago, which has shown a positive impact on the number of students taking and passing AP science courses.

HS	SHS AP Scores during ES/B-C-P sequence (avg 2005-2009)		HSHS AP Scores during P-C-B sequence (avg 2015-2020)	
AP Chemistry (3/4/5s)		• 000		
<u>APES</u> (3/4/5s)				
AP Physics C (3/4/5s)		000		
AP Biology (3/4/5s)		000		

Is there external research to <u>support</u> or <u>refute</u> G-level courses in the high school setting? YES!

The research done on this topic is voluminous and spans the last century: <u>a sample includes</u>

To summarize: Those in support of G-level courses (or offering lower tracked courses) argue:

- Easier to personalize curriculum for struggling learners: less differentiation needed
- Parents support see their child receiving good grades

To summarize: Those in opposition to G-Level courses (or lower tracked courses) argue:

- Lowered expectations/ lower outcomes
- Negatively impacts academic confidence
- Little opportunity for enrichment or advancement
- Increases racial and economic disparity
- Tracking remains recommended for advanced learners

Is there support from the educational community to eliminate ability grouped, G-level classes?

From the Robert Berry, President of the **National Council of Teaching of Mathematics** (NCTM):

"Tracking prevents students access to a high-quality mathematics curriculum, to effective teaching and learning, to high expectations, and to the necessary supports needed to maximize their learning potential. It is time to recognize and identify tracking as a systemic form of segregation. Tracking leads to the distribution of students in ways that are correlated with the inequities based on race, ethnicity, language status, and socioeconomic status found in our broader society. And it is time to begin the courageous work needed to intentionally and systematically remove the perniciousness of tracking and its associated curricular and instructional practices as we move toward creating pathways for success in mathematics for each and every student."

https://www.nctm.org/News-and-Calendar/Messages-from-the-President/Archive/Robert-Q-Berry-III/Initiating-Critical-Conversations-on-the-Discontinuation-of-Tracking/

#### Position from NCSM- Math Leadership Organization

#### Tracking: Policies and Practices Widening the Opportunity Gap

"Tracking is the practice of dividing students into separate classes for high-, average-, and low-achievers." In practice, these might be considered low or high tracks, or some other, similar categorization, and students might be placed into these tracks based on questionable methods using grades and placement exams, perceived ability through teacher recommendation, or non-academic expectations adults have for the students. Much of the research on tracking policies demonstrates the negative effects on certain subgroups of students by denying them access to rigorous coursework.<sup>2</sup>

More generally, a number of studies point to the influence course-taking patterns have on academic outcomes.<sup>3</sup> This influence is true for student subgroups like emergent bilingual students<sup>4</sup> and students from low income backgrounds, different racial and ethnic groups, and different genders.<sup>5</sup> It may disable students from pursuing whatever course of study interests them when they get to high school, college, career or beyond. Tracking becomes worse for students year-over-year, as each consecutive year in a track makes it more difficult to move out of that track.

- 1 Oakes, 2005
- Lee & Bryk, 1988; Gamoran, et al, 1997; Cogan, et al. 2001
- <sup>3</sup> Lee, et al, 1997; Gamoran, 1997; Wang & Goldschmidt, 2003; Riegle-Crumb, 2006; Riegle-Crumb & Grodsky, 2010; Gottfried et al., 2014
- 4 Umansky, 2016; Thompson, 2017
- Oakes et al., 1990; Riegle-Crumb, 2006; Long, et al., 2012; Palarady, et al., 2015

### Policies and Practices Reducing the Opportunity Gap: Detracking

Detracking is the intentional practice of placing students into heterogeneous classrooms usually in an effort to reduce the opportunity gap and allow all students to learn mathematics at high levels. Detracking requires the interruption of policies that have led to the inequitable sorting of students into mathematics courses. If detracking is to happen, school districts and states must go through the difficult process of establishing a new vision for mathematics teaching and learning that dispels the culture of "low" and "high" students as well as "faster means smarter."

mathedleadership.org

Is there support from the educational community to eliminate ability grouped, G-level classes?

*NASSP* (*National Association of Secondary School Principals*) published a position statement on tracking and ability-grouping in middle and high schools: "While tracking was originally intended for practical pedagogical purposes, its unintended consequences make it an obsolete practice in the context of high expectations for all."

"NASSP urges principals to:

- · Organize students in heterogeneous learning groups; diversity can help students learn from each other.
- Provide open enrollment for academically rigorous programs such as International Baccalaureate (IB), Advanced Placement (AP) and honors classes, and provide tutoring and other instructional support to enhance chances for success.
- Provide additional time for struggling students. Interventions designed to remediate students who score two to three years below grade level in certain disciplines and in reading should not be construed as tracking. These students need immediate, intensive accelerated instruction in the form of additional time."

https://www.nassp.org/policy-advocacy-center/nassp-position-statements/archived-position-statements/tracking-and-ability-grouping-in-middle-level-and-high-schools/

#### Research on Tracking- Homogeneous Grouping

"Achievement follows from opportunity." (Burris & Wellner, 2005)

Rui (2009) synthesized 4 decades of research on tracking/detracking in a meta-analysis: "The findings suggest that the detracking reform has appreciable effects on low-ability student achievement and no effects on average and high-ability student achievement. Therefore, detracking should be encouraged, especially in schools where lower-track classes have been traditionally assigned fewer resources."

## Four decades of research on the effects of detracking reform: Where do we stand?—A systematic review of the evidence

Ning Rui

## Implications for practice and future research

The main finding from this review is that detracking, or heterogeneous-ability grouping, was beneficial to low ability students in terms of enhancing their academic achievement without being detrimental to the high- and average-ability students. Therefore, a major implication is that heterogeneous grouping should be encouraged and promoted, especially in schools where the lower-track classes have been traditionally assigned fewer resources and less qualified teachers. This review does not support the competing claims that the performance of higher achieving students would decrease as a result of detracking. At a time when all students are expected to meet high standards, this review of evidence on the effectiveness of detracking provides valuable information for educators and scholars, Al-

#### What are the alternatives to a G-Level Course/Track?

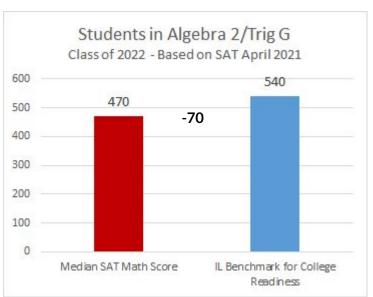
#### Currently in D86...

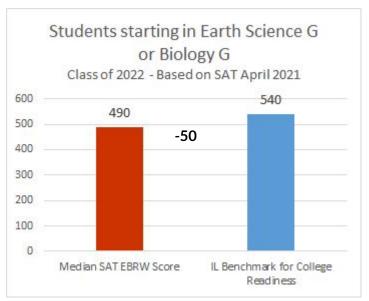
- Paired Literacy or Numeracy courses are currently utilized at both HS and HC.
- Students identified as needing academic support in math and / or reading are enrolled in an Academic Reading or Algebraic Reinforcement course 'in addition to' an on grade level course.
  - Same criteria used to identify and enroll students in G-Level courses
- Paired courses...
  - Focus on foundational grade level skills
  - Backfill prior knowledge
  - Pre and reteach concepts
  - A <u>temporary</u> intervention while students matriculate through grade level courses
- FTE supported Interventionists push-in support in English, Math, Science and Social Studies courses

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#### College Readiness Benchmarks - HC

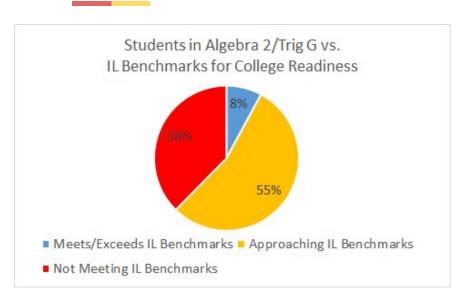
How do Hinsdale Central students in G level courses perform on external assessments?

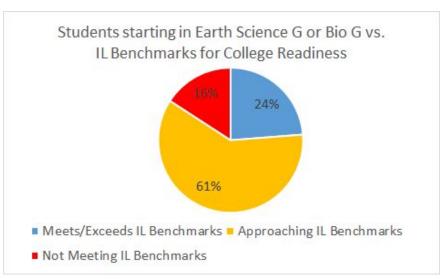




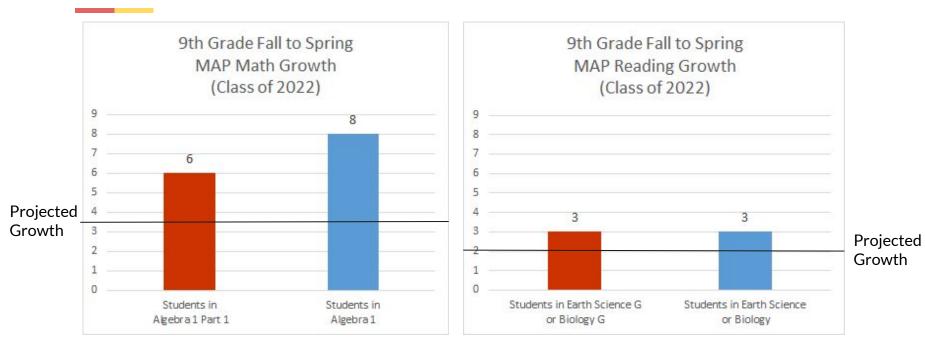
Conclusion: Average SAT math and EBRW scores of students in G Level classes do not meet the IL State Benchmark

#### College Readiness Benchmarks - HC



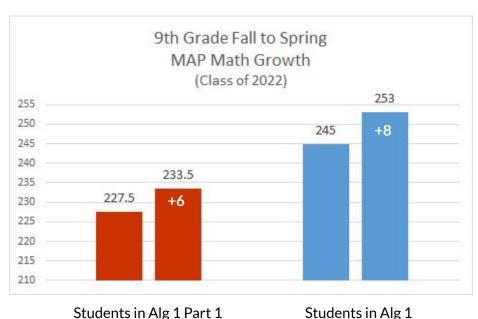


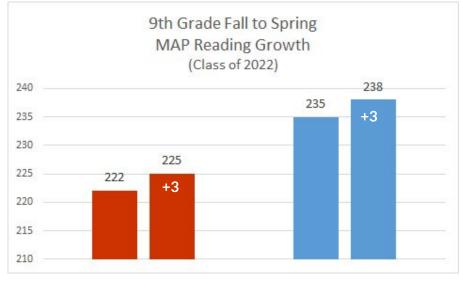
Conclusion: 8% of HC juniors in G-level math meet IL State Standards; 24% of HC juniors in G-level science classes meet IL State Standards.



Conclusion: Student growth in G-level classes are **exceeding** expected MAP growth during their freshman year (nationally normed), but are **below or equal to** the growth rate of their peers in regular classes.

Conclusion: Despite better than expected growth, students in G-level classes begin High School with notable academic deficits and do not reach the academic level of their peers in regular level classes.





Students in Earth Science G

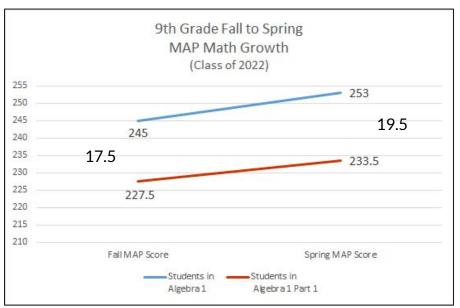
or Biology G

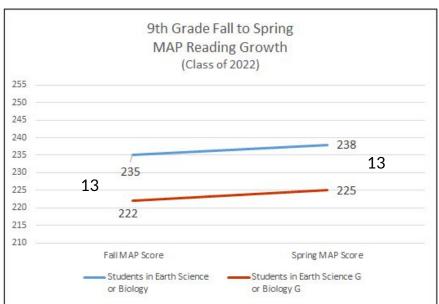
Students in Earth Science

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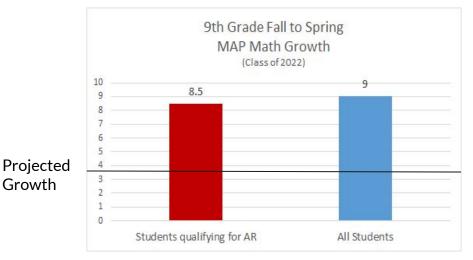
or Biology

Conclusion: Despite the clear growth, if an intervention is truly effective, the growth of the students in the intervention (red) should be moving closer to the growth line for students in the regular classes (blue)

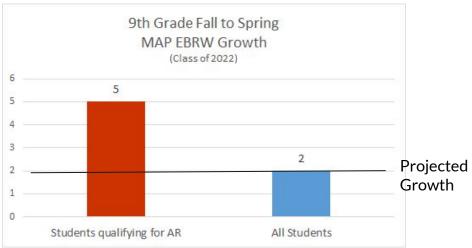




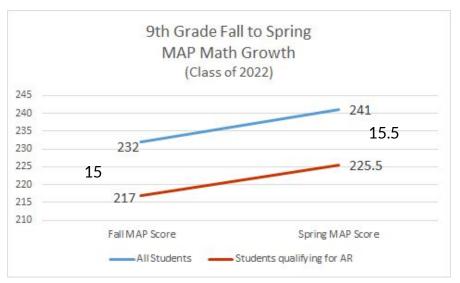
Conclusion: At HS, students in paired intervention classes are nearly matching the academic growth in math and exceeding the growth of students in regular EBRW class by 3 points.

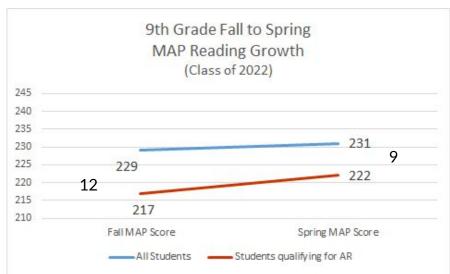


Growth

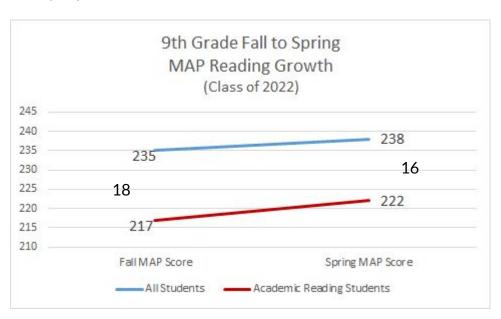


Conclusion: At HS, students in paired intervention classes are nearly matching the academic growth in math and exceeding the growth of students in regular EBRW class by 3 points.





Conclusion: At HC, students in a paired English intervention class are exceeding the growth of students in regular EBRW class by 2 points.



#### Demographic Composition (Classes of '17-'20)

	Grade 9 Students taking Algebra 1 (Regular Level)	Grade 9 Students taking Algebra 1 Part 1 (G level)	Average Demographic Enrollment
White	78%	72%	71%
Black	4%	9%	2%
Asian	11%	6%	17%
Native Hawaiian or Other Pacific Islander	0%	2%	0.11%
Hispanic	7%	11%	6%
Special Education	10%	51%	8%
Fee Waiver	5%	20%	5%
EL	1%	3%	1%

Conclusion: G-Level courses are disproportionately comprised of BIPOC student, students with IEPs, and low-income students.

#### Demographic Composition (Classes of '17-'20)

	Grade 9 Students taking Earth Science or Biology (Regular Level)	Grade 9 Students taking Earth Science G or Biology G (G level)	Average Demographic Enrollment
White	80%	70%	71%
Black	2%	5%	2%
Asian	12%	13%	17%
Native Hawaiian or Other Pacific Islander	0.3%	0.6%	0.11%
Hispanic	6%	11%	6%
Special Education	12%	28%	8%
Fee Waiver	3%	11%	5%
EL	0.1%	4%	1%

Conclusion: G-Level courses are disproportionately comprised of BIPOC student, students with IEPs, and low-income students.

## How has the Curriculum Alignment Process responded to data and research about struggling students in low-tracked courses?

- Program Teams have been discussing and recommending replacement of G-level and 'defacto' G-level classes with grade-level appropriate courses
- Focused PD on equipping teachers with the tools to reach all students
- Continue to support the model of FTE content interventionists exist in English, math, science, and Social Studies.
- Continue to support the "in addition to" and paired intervention options as course sequences are discussed and recommended

#### **District 86 Next Steps**

- Continue to replace all G-level courses over the next three years
- Continue to review, evaluate "paired" intervention courses to best meet the needs of individual students with identified deficits in reading and math.
- Continue to evaluate our FTE supported content interventionists
- Augment the use of external assessments (e.g. NWEA-MAP and PSAT), and internal assessments to identify when students are struggling and provide direct, individualized support.
- Continue to create pathways for student to move from regular-level to honors level.
- Implement acceleration courses in math for students who might be 'late bloomers' or who
  have charted a path through math that includes acceleration.
- Maintain a robust honors / AP / accelerated program of studies for advanced learners