



Office of Superintendent of Schools

Dr. Anna P. Nolin

To: NPS School Committee
From: Anna Nolin, Superintendent
Re: Superintendent Update
Date: February 10, 2025

Mid Year Data Analysis: Districtwide

Printed separately for your reference is a memo from the Director of MTSS, Dr. Maria Kolbe, summarizing the district's mid-year, coordinated and consistent data analysis sessions, trainings and new tools. [Memo is linked here as well.](#)

Strategic Planning Update

A first meeting of the strategic planning team—a team of 59 members (students, staff, parents and community members) met a week ago at Zervas elementary. We went over the strategic planning process, I shared themes for consideration, district assets and needs, and our current goals. We meet again on Wednesday, 2/12 to do a collaborative data analysis of surveys, reports and entry plans to develop key goal areas for the district plan.

An Update on what is referred to as “Multi-Level Classes” in Newton Public High Schools

Background

It is not productive to examine or learn about programs by reading op-ed articles in papers or from chain emails or social media. That is where I learned that I am ignoring the crisis around multi level classes and studying data about its effectiveness for a year.

It must be first stated that when staff, students and parents refer to multi-level courses, they could be referring to many different things. Currently, there is no single “multilevel” model in this district. The models for learning in both of our high schools vary by school, grade, department, team and individual educator. We have many iterations of what is called multi-level.

We write this update to help people understand the complexity of working on our high school courses and that there is no one/quick fix to address the challenges of our current models.

What is the district doing about multi-level courses right now?

While we acknowledge the conversations taking place in the media and on community email threads, we feel that the most productive way to move forward is to focus on a deliberate process of learning, collaboration and improvement. As new leaders, Drs Roundtree, Flanagan and I need to be with our educators—bringing our instructional leaders together to learn as much as we can about the current organization of course leveling practices in NPS and to data and research to guide the strategic steps we take to improve.

We cannot do an analysis of whether “it” (meaning multi level classes) has worked or not because there is no one “it” to measure. Also, in the absence of defined metrics for what the district was trying to solve and measure or track regarding students and their development, and in the presence of many different models that have been created (now grouped as “multilevel”) we cannot determine effectiveness.

We must focus on building a strong future system that allows students to get the challenge level they want and are ready for and allows students a stable system upon which to build their goals and learning agency. In order to find a path to this future system we have had to listen and collaborate with our educators to understand what we are currently doing and what we can do next.

We have certainly heard staff, student, and parent perspectives on how multilevel classes have made them **feel** (either teaching them, learning in them, parenting someone in them, or what they hear was going on around them). Hearing these feelings and experiences is important and has led us to be able to actually take actions that will improve (in quality, rigor, and consistency) all courses, levels and student experiences. Some teachers have kept data and statistics on what is going on in their classrooms, but given the lack of training, consistent central office leadership and vision related to curriculum and assessment and the lack of curricular resources available to the average Newton educator, they are running themselves ragged simply trying to meet the needs of all of their students—whether they are leveled in a single level class or a multi-level one.

Here is what we are simultaneously doing to learn about our programs and strengthen our district practices:

- **Curriculum Council:** Our Curriculum Council (School Leaders, Department Heads, Dr. Roundtree and Dr. Flanagan) have been solely focused on building on the foundation of past work to establish a common vision for course levels in NPS.
- **Defining Rigor and Levels:** A planning team, meeting regularly, has created a shared vision for academic rigor, defining key language that we will use to align our system for leveled courses. We are updating our draft of the Course Level Descriptor document that we will use to communicate our vision for course levels at both high schools. A refresher on the different ways that schools and colleges define rigor and aligning around rigor is the first step to any sort of leveling or curriculum or assessment design work.
- **Classroom Learning Walks:** Through the district’s Instructional Leadership Academy, funded in partnership with NSF, we have been conducting learning walks with our leaders for all levels in NPS. Specific to our work learning about course levels and multi-level classes, we conducted a learning walk to math classes at Newton North on Monday, February 3rd and we will visit math classrooms at Newton South on Friday, February 14th. Learning walks let groups of administrators review and ask questions about practices and learn from teacher experiences and expertise while allowing us to seek places for improvement.
- **Listening Sessions at Newton North:** We are meeting with teacher groups to listen to their perspectives on course levels and multi-level classes and the myriad ways the courses are executed across the district. Dr. Nolin conducted a listening session with Department Heads at Newton North on December 13, 2024. Dr. Nolin, Dr. Flanagan and Dr. Roundtree participated in an additional listening session during a Newton North Faculty meeting on Tuesday, January 7th.
- **Listening Sessions at Newton South:** Dr. Nolin, Dr. Flanagan and Dr. Roundtree participated in a listening session with teachers at Newton South on Thursday, January 30th. We have another opportunity currently scheduled for after February Recess.
- **District Visits:** Drs. Nolin, Flanagan and Roundtree are touring other districts and speaking to teachers and school leaders to learn their approach to multi level classrooms to see what

has worked and what have been the challenges. Examples of districts: Lexington, Concord-Carlisle.

- **Literature Review:** We have reviewed relevant literature and research on the topic of multilevel/ heterogeneous instruction and instructional design for interdisciplinary learning.
- **Math Curriculum Review:** A portion of both the family, staff and student survey for the math curriculum review will include questions related to our current multilevel system. A first draft of curriculum review is complete and will be shared with the curriculum review team prior to public presentation to the school committee.
- **Hearing from Students and Families:** Last year, (2023-2024) Dr. Nolin conducted 59 different community (BBQ) visits across the city and math and levels came up at almost all of them, with families giving anecdotal descriptions of their perceptions of what the current set of math classes was and how the concept of multi-leveling was affecting their learners.

Clearing up Misconceptions

Using our gardening metaphor (thrive, grow, garden city) and the idea that as a school system, our Multi-Tiered System of Support (MTSS) should, with coordinated district wide support, allow teachers across the system to cultivate thriving classes where all learners are “fed” what they need to thrive our future leveling system needs to be designed differently and be executed consistently across all schools. Currently, because of a lack of structure, definitions and resources, we have a field where a thousand wildflowers bloom....success blooming by accident or by those that are able to withstand the challenges of our current system.

- **Multilevel is the same in both high schools, across departments and grades.**
Currently, a course-leveling system exists wherein students are assigned to specific course levels for their academic classes. For most classes, we have three course levels: College Prep, Advanced College Prep, and Honors. However, in some areas of the district, there are four levels. We have AP courses at both high schools that students can enroll in independent of the named levels above. AP classes, their execution and status in student lives and how that has shifted recently is a topic for a memo all on its own.
- **There is agreement and shared understanding/practice about why we level and what the standards are for placement into different levels.**
There is general agreement conceptually that it is very important not to think of students as the level of classes they choose (ex. “Honors students” or “CP students”). Our vision is that our students make choices along a continuum of course levels based on their proficiency, preferences, course loads and needs. We encourage students to seek balance as well as academic challenge and oftentimes a student’s course level selection in one class is made in combination with choices in other classes to ensure a manageable workload.

There has not been district-wide agreement or definition of the rigor levels of any level of class. Some unity and alignment exists if teachers are afforded common planning time. This is not reliably available across the system.

Students are leveled for classes based on grades and teacher recommendations. There are some common ideas about grading, but teachers have their own systems that may or may not mean students are grouped with similarly-abled students into levels.

- **A Majority of Staff Feel One Way or Another**
Currently there is no consensus about multi-level classes by buildings, educators or administrators. Some hate it, some love it, and some feel it has immense promise if teachers

receive more effective support and training to do it. Indeed, many teachers have indicated they signed a petition about multi-level classes because they need help to better implement multilevel instruction and they thought that is what the petition was asking for. The common theme is: I have seen some positive outcomes but I feel ineffective and incapable of sustaining what the kids really need given the range of needs and our lack of training.

- **Level composition and configuration is understood by the public, families and staff in our community.**

Levels in our high schools are grouped within academic classes in the following manner:

- **9-10th grade:** College Prep/Advanced College Prep Combination, Accelerated/Honors Combination
- **11-12th grade:** College Prep/Advanced College Prep Combination, Single-Level Accelerated, Single-Level Honors
- One school has created the equivalent of interdisciplinary small teams with integrated thematic curricula and families opt into it (and have for over 20 years) and this has students of all abilities in it in any subject (heterogeneously grouped volunteers). In the earlier years of these programs the staff were given time and some professional development many years ago to learn to teach with this model. The professional support, materials and training for this have not been continued by the district for many years.

Students who are labeled CP, ACP, Honors and AP are all in one class with students with severe language and disability support needs.

Levels today are like the tracking systems many parents experienced when they were in school.

- One common misconception about multilevel classes is that the approach places students enrolled in all course levels in the same classroom. While this is true for opt-in interdisciplinary program at one of our high schools, the vast majority of multilevel classes only combine students in two course levels.
- Further, parents and observers need to know that students are not “CP” kids or “Honors” kids, they are students who have been placed in a level for a subject or have chosen a level.
- Different from when many parents went to school and were “tracked” in levels—i.e. placed in all advanced classes even if they were not advanced in a subject because they were advanced enough and schedules locked them into tracks. Today, students work with their guidance counselors and teachers to curate courses that will challenge them, serve their passions and allow them to engage in other activities. For example a student may opt for 4 Honors classes and one CP course because the CP course is not their passion or strong suit and they want more time for the other classes. Teaching students balance and how to make these matches and choices helps them learn important life and self-reflection skills.

The range of learning needs within multi-level classes cannot be met.

- Post-COVID, the scatter and gaps in learning for any level of students is different than pre-COVID conditions. In any and all classes across the district (and the world) the range of learning needs widened post-COVID. This issue is not unique to Newton. The range of learning needs is broader than it has been, in other times. As our last classes that learned/were introduced to school during COVID age up in our

system, this variance should, if we are using our assessments and MTSS resources well, be reduced over time.

- Tracking learning loss and gains in Newton is made harder by the lack of common assessments and tracking of student gaps over time. We are making progress on building the MTSS system and interventions that will make this the norm in all grades in the district.

The district could just solve this by putting back all single level classes

There are several challenges when it comes to assigning courses by “ability.”

- First, we would need common standards and expectations for course levels for both high schools, which we are in the process of developing.
- Second, we would need to agree on specific indicators of ability / proficiency on which these decisions would be based.
- To ensure that placement decisions are made fairly and consistently, we would need common assessments for both high schools to determine student course level assignment.

Math as an Example

Recent articles in the Boston Globe and recent community conversations have focused on multilevel math classes, so we will take the opportunity to discuss math classes in detail here. Note: we are examining all subject areas with regard to leveling, not just Math.

Proportions of Students in Multilevel classes by Level in 9th Grade Math Courses

Newton North, 9th grade:

- There are 14 sections of Math 1 Honors / Accelerated courses, the average class size is 24 students and the student ratio is 70% Honors students, 30% Accelerated students. This means 8 students are considered ready for accelerated learning and 16 are Honors level. Teachers teaching this course differentiate learning groups, experiences assessments, amount of problem sets and complexity of sets. Teachers push Accelerated students to take on Honors work when they can. All options are available to any students within these classes.
- There are 8 sections of Advanced College Prep and College Prep courses, the average class size is 18 students and the student ratio is 63% ACP students and 37% CP students. (6 or 7 students leveled as College Prep and 11 or 12 who are Accelerated). Teachers push College Prep students to take on Advanced work when they can. All options are available to any students within these classes.

Newton South, 9th grade:

- There are 12 sections of Math 1 Honors / Accelerated courses, the average class size is 26 students and the student ratio is 56% Honors students, 44% Accelerated students. (14 Honors with 11 Accelerated students).
- There are 8 sections of Advanced College Prep / College Prep courses, the average class size is 18 and the student ratios are 76% ACP students and 24% CP students. There is one standalone CP class. (13 or 14 students in ACP and 4 or 5 CP students).
- Many teachers at South approach the multi-level courses by offering the equivalent of two courses worth of material at the same time. Still others do as described at North above differentiating tasks, assessments and groupings.

Challenges that exist with our approach to course leveling and multi-level classes

- **Lack of Vertical Alignment PK-12 or Coordination Across Grade Levels**
Compounding high school leveling difficulties noted above, we have mapped curriculum standards covered by each of our middle schools and what is covered by the feeders to the high school varies widely by school and the high schools cannot be sure that students matriculating from both of their feeder middle schools have been exposed to the same content. Pacing guides, curriculum guides, common units and assessments do not exist in a systematic manner, further complicating leveling and placement of students. Many bright spots exist in individual teacher and team practices at middle schools, however, this is borne out of grade level teams making their own coordinated assessments –this work is not consistent between grades or levels.
- **Variation in practices:** As mentioned earlier, we have learned that there is no common agreement or definition between classrooms, content areas and between the two high schools on the level of rigor that these levels should entail and teachers are requesting this understanding.
- **Professional learning and support for multilevel instruction:** Both high schools have provided some professional development focused on differentiating instruction and / or Universal Design for Learning, but we do not yet have a consistent plan for staff professional learning about differentiation across both schools.

What data is being collected and why?

We have identified three stages of our work to align course levels and any future decisions about multi-level classes. During the first stage of our work we are focusing on reviewing existing data related to course levels and multi-level classes and collecting new data that will inform our future steps.

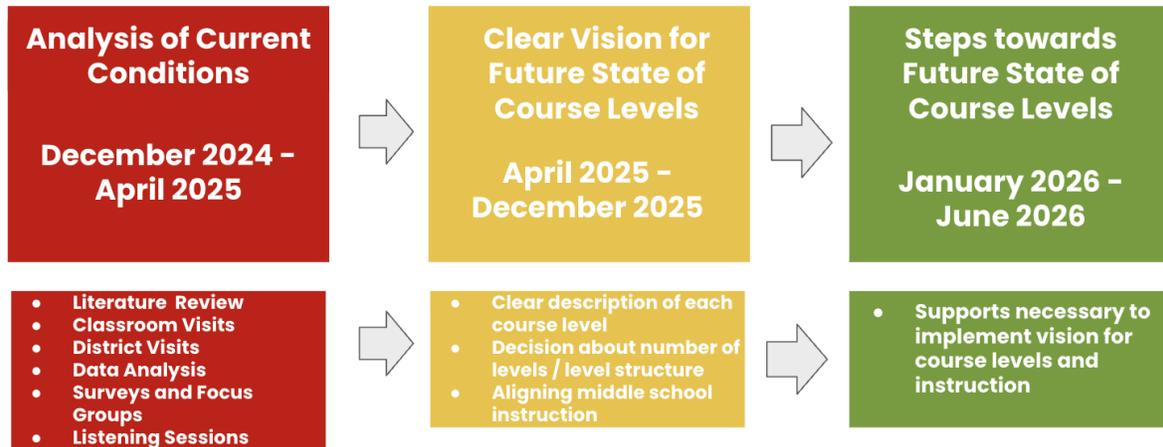
Data / Information / Context that we will review includes:

- Proportion of students by level in multi-level classes (How many kids of each level are in each section)
- Comparing / contrasting classroom curriculum in course levels (What curriculum is taught)
- Using tools like the Hess Matrix to compare the level of cognitive task rigor between course levels
- Teacher approaches to planning/how are teachers planning
- Investigating trends in student achievement by standalone leveled courses vs. multi-leveled courses (SAT, AP, College attainment, etc.)
- Surveying staff about course level / multi-level experience
- Looking at whether rigor from prior years' unleveled courses has been altered within a school or department
- Looking at how the new high school schedule has impacted the amount of instructional time which may be feeding into what can be covered in certain courses vs. when the same courses were taught pre-COVID/pre-New High School Schedule.

What is the plan?

We have developed this draft timeline below to communicate our process to learn, collaborate, plan and implement our vision for course leveling in NPS to our building level communities. We will share this with teachers during the next scheduled school department meeting.

Draft: District Timeline for Course Level / Multi-Level Adjustment



Other Pressing Next Steps

Working concurrently with our middle school staff, while we are doing all of the above with our high school staff, we will need to (using math as an example) align our K-8 curriculum moving backwards from the leveling and content expectations we define in these future state courses/levels.

In math, we will also need to make a decision about whether we work to ensure all students take Algebra I before matriculating to high school. If we do, this will change grade 9 mathematics curriculum and have a ripple effect on the content and complexity of what is covered when in high school math.

We need to diversify the amount of math electives we offer for advanced math students to meet the needs of those truly engaged and hungry math students.

Finally, we need to work at community education so families understand the courses and levels, know and trust their student's achievement data as provided by us through regular common assessments and benchmark assessments, and work as a community to help children balance challenge in academics with their own social emotional health.

Every child should know the pathway to Honors coursework if they want it; every child should be able to goal set for their desired learning level and their own desire for challenge or need for support, understand their own performance (strengths and weaknesses) and be partners in their own learning and advancement. This type of collaborative partnership with our students reduces anxiety and helplessness and increases grit and confidence. The district must offer families the public schools a curriculum and instructional contract—a promise—of what every child will learn, regardless of level, and what supports are available at every level, grade and subject area.



To: Dr. Anna Nolin

From: Dr. Maria Kolbe

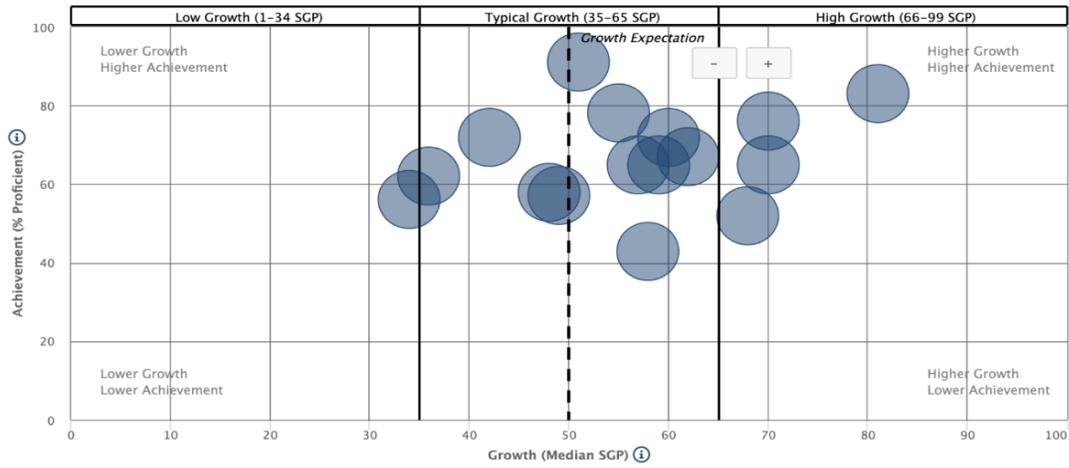
Re: Mid-year data review, district wide

Date: February 10, 2025

Over the past two weeks, we have engaged in an exciting and in-depth analysis of student data from our winter administration of K-8 universal screeners for literacy and math. As you may remember, this marks the first year we have implemented a universal screener for mathematics in grades K-8, and with the winter administration, we were able to examine student growth data alongside overall achievement for our STAR math assessment as well as our iReady literacy assessment.

As a central administration team, we have analyzed this data using a newly developed protocol to identify district-wide trends. Then, on February 3rd we held our first middle of year data workshop, facilitated by our Chief of Data and Research and our Director of MTSS. All 19 principals from our K-8 schools attended, along with school representatives, to utilize the same data protocol used at the district level in order to uncover literacy and math trends in their school-specific student data. Looking ahead, faculty teams in our elementary and middle schools will conduct a deeper analysis of their literacy and math data, supported by MTSS coaches at the elementary level and the Director of MTSS for middle schools. This process will guide instructional adjustments at both the classroom and individual student levels.

We are thrilled to see how our new data management platforms are facilitating highly impactful and meaningful discussions. An example of a bright spot is a Star Math visualization that shows a matrix of achievement on one axis and growth on the other axis, allowing a classroom teacher to clearly see their class of students in this unique and highly actionable view. School leaders can also see the same view, but with classrooms mapped along the same matrix instead of individual students. This is just one example of dozens of practical elements in our data management platforms that support efficient and effective data-based decision making.



We look forward to making these mid-year data analysis activities memorialized in our schedule moving forward, just one way in which we are strengthening our district systems and structures to support each school in becoming a multi-tiered system of support in which all students thrive.