

Newtown Board of Education
Newtown, Connecticut
Curriculum and Instruction Subcommittee

Minutes from the Board of Education Curriculum and Instruction held on February 22, 2018 in the BOE Conference Room.

J. Evans Davila J. Vouros M. Ku J. Bracksieck C. Pierce

J. Vouros called the meeting to order at 10:05 a.m.

Public participation: None

K-4 Math Science Specialists J. Bracksieck from Middle Gate and Chrissie Pierce from Head O'Meadow presented the newly developed K-1 Math curriculum. This curriculum was drafted throughout the 2016-17 school year by the four Math Science Specialists, with embedded professional learning in Concept-based design during the process with the help of retired Newtown teachers Gael Lynch, Maura Drabik, and Gail Maletz. The project was extended into summer work hours, in an effort to bring classroom teachers into the process. The Specialist brought the curriculum draft to both the K-12 Math Committee and the K-12 Curriculum Council, incorporating feedback from the members of those groups into the final version.

When framing the curriculum's concepts, C. Pierce stated that the team carefully considered their choices when identifying the concepts that would move forward with the students across the grade levels as they encounter more challenging and sophisticated math coursework. J. Bracksieck shared examples of some concepts and their progression. C. Pierce and J. Bracksieck noted that the pacing, as it is populated in the calendar on the Rubicon Atlas curriculum map extends across longer periods of time for certain units, with the explanation provided that these are critical skills and concepts that are tapped and explored throughout the year and do not end with a discreet unit time period. C. Pierce noted that vertical alignment of the mathematics curriculum across grade levels and schools was another component of the curriculum development that was completed. The Specialists worked together with the Reed Intermediate School Math Science Specialist Jessica Fonovic to gather her feedback during various points in the drafting phase.

J. Evans Davila asked about the level of consideration given to the Common Core Mathematics Habits of Mind or Math Practice Standards, in particular which specific standards do we find to be most challenging for students to incorporate in their daily performance in school and where might these be addressed in the curriculum that was produced. J. Bracksieck responded that "perseverance" with problem-solving takes work to instill in students, and she and C. Pierce highlighted where they believe the program resources in *Stepping Stones* provides plenty of materials to give students opportunities to solve authentic math problems they would encounter in the real world. J. Evans Davila discussed how the elementary schools are working with Dweck's Growth Mindset to focus on students' self-perception and confidence when facing challenging work that requires repeated trials. A discussion ensued about the difference in

today's mathematics classroom, in which students are given the opportunity to arrive at the correct answer in a number of different ways that make sense. It was noted, also, that the exploration of process when a student arrives at an incorrect answer contributes to gains in student proficiency, as well. J. Vouros asked for explanation of how students who are high achievers are appropriately challenged within their classes. The opportunities given to students through the Enrichment program was highlighted as a way in which these students' needs are met. C. Pierce and J. Bracksieck also explained how intervention for struggling students is implemented using assessment resources from the Envisions program that is implemented at Reed Intermediate School. This was cited as an additional example of how the Math Science Specialists are collaborating across grades K-6 for a smooth transition for students from elementary school to Reed. M. Ku asked how the Smarter Balanced and the NWEA scores might correlate, meaning how NWEA might be predictive of Smarter Balanced performance. J. Evans Davila offered insight on NWEA's recent study and stated that we would need to gain more data to see if findings can be substantiated in district. All agreed that the NWEA is intended to provide an individual student's projected growth (RIT), which is a different purpose in comparison to the summative results provided by the Smarter Balanced assessment. NWEA is very useful to grouping students and differentiating instruction, and it also provides much more specific information about a student's skills.

M. Ku commented that she sees a significant difference in the way in which math is being taught in the elementary schools nowadays, and she finds it to be very effective and engaging for students. J. Bracksieck and C. Pierce replied that students develop strong skills in math fluency that are also very different from how math was instructed when they were students.

J. Evans Davila provided the committee with next steps in the approval process, in terms of scheduling the first and second read on upcoming BOE agendas. C. Pierce and J. Bracksieck stated that they would ask their two colleagues who are K-4 Math Science Specialists at Hawley and Sandy Hook about their availability to attend the first and second read at the BOE meetings. J. Evans Davila plans to inform K-8 District Math

Public participation: none

J. Vouros motioned to adjourn at 11:05 a.m.

M. Ku seconded the motion

Respectfully submitted,
Beverly Bennett

These are draft minutes and are subject to the approval of the Curriculum and Instruction Committee.