

Curriculum Corner

Curriculum, Instruction, and Assessment Highlights of the Duxbury Public Schools November 2015

Curriculum Updates

English K-12

By Dr. Karen Baynes, Supervisor 6-12, and Ritamarie Benoit, Supervisor Alden

The English Language Arts Department at Duxbury Public Schools is currently in the second year of a five-year curriculum review cycle.

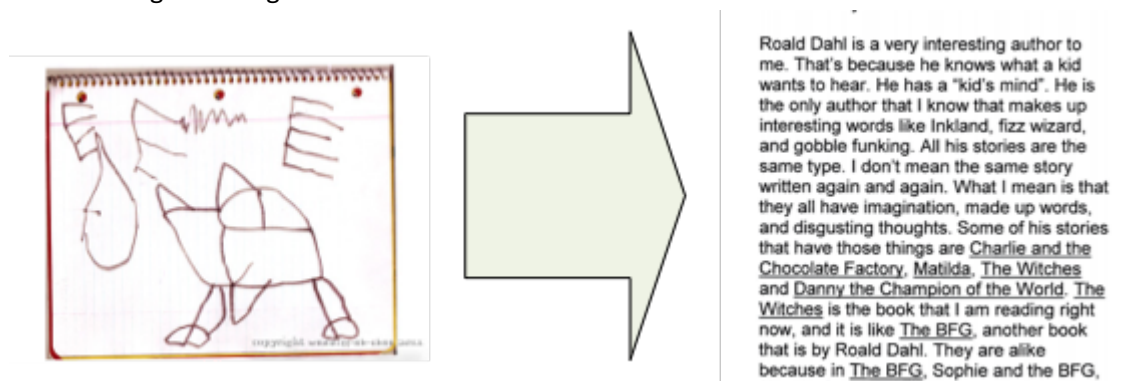
Last year, the department conducted an internal review of its writing curriculum. The curriculum review team was composed of teachers of every grade level, 1-12, as well as school and district administrators and curriculum specialists. The district also hired a committee of experts from the Buzzards' Bay Writing Project to conduct an external review. At the end of the year, the district committee considered the recommendations of the external review team and made its own recommendations. Those recommendations can be found on pages 21-23 of the "Report of the English Language Arts Subcommittee K-12 Writing Curriculum Review (<http://www.duxbury.k12.ma.us/cms/lib2/MA01001583/Centricity/Domain/32/ELAWritingReviewReportMay2015.pdf>). This year our task is to begin to implement those recommendations.

The work began over the summer. At the elementary level, a team of teachers from each grade level collaborated to map out the writing curriculum, embedding a new program, Empowering Writers, along with other supportive resources, to create a robust writing curriculum for students. This program was chosen after careful consideration of the recommendations made by the curriculum committee. At the secondary level, teachers met during the summer to revise common writing assessments. Teachers administer and blind-score these assessments using a program called Academic Merit, collecting baseline data in the fall and comparative data in the spring on student competency in five main areas of writing: controlling idea, organization, development, diction, and conventions. Teachers also established a provisional sequence for teaching associated skills in grammar. Finally, the research paper sequence was revised to allow for more focused instruction in research at grades six, nine, and eleven, with shorter and more frequent research papers and projects being assigned in grades seven, eight, ten, and twelve.

The work continues during this school year. At the elementary level, teachers continue to use Empowering Writers as the primary resource for the writing curriculum. At the secondary level, The ELA curriculum review committee meets monthly to further discuss ways of putting the recommendations into place. The committee will begin by establishing some basic expectations around writing for students in all subject areas. Professional development time in October was used to start the process of revising the curriculum maps to reflect focused instruction on specific writing skills within each literary unit.

With the support of their teachers, students make steady progress in their writing skills as they advance up through the grades. In the elementary grades, this progress seems little short of miraculous. From birth, children hear

language all day long. But the leap from hearing language in a multidimensional world to understanding that these sounds emitting from our mouths and devices can be coded onto paper or screen in a specific way represents an extremely complex evolution of understanding. As complex as this process is, with few exceptions, everyone can do it. Our current MA Curriculum Frameworks outline learning goals in writing to include an understanding of writing types, processes, techniques, and skills. Preschool writing begins with drawings, dictations, and letter-like shapes that build the foundational understanding that a child's thoughts are important: worthy of recording and sharing with others. By fifth grade, students produce sophisticated pieces of writing in various genres, with practices utilized by published authors. The graphic below demonstrates the dramatic progress students make from kindergarten to grade five.



Generally, teachers strive to engage students in activities and authentic writing assignments that challenge, delight, and inspire students. Technology has played a pivotal role in this engagement. At the elementary level, students use applications that help them transform their ideas into lively, animated tales and to connect with students in other schools around the world. At the secondary level, students are using the technology to feature their writing in gloriously illustrated iBooks, to establish written contact with students in faraway places such as France and Kenya, and to create character maps and literary storyboards. The use of Google Docs allows for increased collaboration on the writing process. Programs such as Prezi and Kahoot provide fun and interactive ways for students to learn elements of writing. The Schoology LMS allows teachers to post writing templates and other support materials for ready access by students.

Students are inspired to see themselves as future writers through interaction with real living authors, several of whom have visited the district so far this school year. At the secondary and elementary levels, professional authors are invited to the district to talk to students about the processes they go through as writers, inspiring youngsters to believe in themselves as authors. Kate Hansen, author of *Literal Lily*, *Fickle Fiona*, and *Curious Christopher*, visited second graders last school year and will be returning again in January. At eighth grade, guest speakers from WATD radio visited students in Mrs. North's ELA classes and discussed the application of writing and communication skills in settings beyond the school. In early November, sixth graders engaged in a Skype session with Dave Roman, author and illustrator of numerous graphic novels. Two other graphic novelists—Gareth Hinds and LauraLee Gullledge—are scheduled to visit the district later on in the school year. Mrs. North and assistant librarian Annie Potash are both to be commended for their work in bringing these writing professionals to Duxbury.

Guiding students along their journey as writers are expert teachers. Well versed in the demands of our state frameworks, our teachers provide direct instruction and varied activities that each year provide the opportunities for students to grow in their writing development. In addition, the importance of parent involvement in this process cannot be overstated. When children see the most important people in their lives (family) lending

legitimacy to writing as a necessary life skill, children will value it themselves and work hard to be good at it. The building of a successful and confident child takes a team of dedicated adults, continually communicating to our youngsters that what they think, say, and write matter and that we are here to listen and to guide them along their journey. Ultimately, we are all in this together. It truly takes a village.

Math K-12

By Stephanie Iacadoro, Supervisor 6-12, and Suzanne Coyle, Supervisor Chandler

As we reflect on the beginning of the school year, it is encouraging and exciting to see the shift in mathematical discussions in the classroom and the changes in Mathematical Mindsets. The Mathematics Program at Duxbury Public Schools has been working continuously to improve on existing programs and integrate curriculum and instructional changes that have been highlighted as priorities through the Massachusetts Curriculum Frameworks for Mathematics. The 2011 Massachusetts Curriculum Frameworks called for attention to the Eight Standards for Mathematical Practice and six Guiding Principles for Mathematics Programs in Massachusetts. These principles and practices require that students and teachers alike engage in mathematical discussions to solve rigorous, real-world problems, model with mathematics, and make connections between mathematics concepts both horizontally and vertically within our curriculum. In order to effectively implement these changes, we have made systematic changes to the K-12 Mathematics Program that include the purchase of new instructional materials, targeted professional development, and a renewed focus on the importance of cross curricular instructional practices and opportunities.

Emphasis on the Standards for Mathematical Practice

We are pleased to see the seamless integration of the Standards for Mathematical Practice this year in the elementary classroom. As we visit classrooms, it is immediately evident that students are engaged in rigorous problem-solving tasks and are explaining and critiquing their own solutions and those of their peers. The new enVision2.0 math program provides daily opportunities for this type of collaborative work and to apply the mathematical practices in their work. Along with improving their ability to solve problems, construct arguments, and critique reasoning, has come the shift in Mathematical Mindset to a growth mindset. Students are actually talking about sticking with tough problems because it grows their brain and that mistakes are valued more than opportunities to get easier problems correct quickly because mistakes help us learn deeply.

Throughout the building at the Middle High School, you will see posters that define the eight Standards for Mathematical Practice and translate what that means for students. Teachers are using these posters and the support of their textbook and materials to encourage higher order thinking and problem solving in the Mathematics curriculum. The purchase of the Glencoe Mathematics textbook series at the Middle School has assisted teachers and students in making sense of the Standards for Mathematical Practice and utilizing technology to support student learning through the online learning platform provided by the textbook series. This resource, coupled with targeted professional development, is bringing the Standards for Mathematical Practice to life for all students at all grade levels.

Emphasis on the Guiding Principles for Mathematics Programs in Massachusetts

Across all grade levels of math instruction, the guiding principles have provided a structure and basis for the development of curriculum and the fine tuning of instructional practices that support student learning. The Guiding Principles for Mathematics Programs in Massachusetts emphasize the importance of the meaningful integration of technology and the development of defined content standards that are clear, specific, and stimulate the curiosity of students. In addition, our programs emphasize the use of a variety of assessment methods that inform instruction

and support mathematical literacy through reading, writing, and communicating in the language of mathematics. With the support of building and district wide initiatives and opportunities, the Mathematics Program has certainly addressed all of the Guiding Principles and will continue to do so for the benefit of Duxbury Students.

Emphasis on Improving the Written Curriculum

Our curriculum review cycle and Math Subcommittee work has framed and provided structure for the continued improvement of the Mathematics Program at all grade levels. This work led to purchases at the K-8 schools and professional development offerings that have resulted in a cohesive, focused program fully aligned to the rigorous standards that our state demands. Additionally, the opportunities for teachers to collaborate across grade levels has increased consistency of instructional strategies and the use of precise mathematics vocabulary. In ongoing Mathematics Subcommittee efforts, we are continually evaluating the implementation of these changes and working to further develop our vision for the Mathematics Program; providing students with the foundational skill set necessary to achieve Mathematics understanding at high levels. These efforts to revise existing curriculum will ensure that Duxbury maintains a successful Mathematics Program that exceeds state guidelines.

Our goals are to maximize student engagement and understanding through the careful and strategic improvements of the K-12 Mathematics Program. Every improvement has been supported through targeted professional development and opportunities for teachers to contribute to and collaborate on the curriculum and program revisions, which is likely why we are seeing such success already. Moving forward, we will continue to look for ways to integrate the Standards for Mathematical Practice and the Guiding Principles for Mathematics Programs in Massachusetts in order to provide our students with the opportunity to master Mathematics concepts and reach their full potential.