

Curriculum Matters...



Inspired work by the faculty and students of SAU 21!

Mathematics



The Mathematics Vertical Team is led by Dana Hanson Babyak (North Hampton) and includes Jason Miller, Kathy Newcomb, Brian Michaud, J.J. Shivel, Joan Bauer, Tom Hayward (Winnacunnet), Drew Szeliga (South Hampton), Melissa Robinson (Hampton Falls), June Casey and Dan Glover (Seabrook), Andrea Dutton (Hampton), and Kris Darosa (Sacred Heart).

The team has continued its focus on re-aligning the math curriculum for the Common Core State Standards (CCSS). Through meetings in March and April they have identified a few challenges to be met:

- Students are still challenged in high school by numbers involving fractions and decimals. How will we build students' confidence with these common expressions over the grade levels?
- Students in higher level math classes (WHS) are highly dependent on calculators. How do our students also grow their abilities to estimate and perform simple manipulations in their heads?
- Upper elementary through 8th grade Common Core expectations in math are critical for students' success in Algebra and beyond. On June 19th there are two special SAU-wide workshops focused on **Common Core K-8** and **Hands-On Equations** which assist students in Algebraic understanding!
- How can we use Performance Pathways to follow our students development? We need more training opportunities and would like to develop an anecdotal thread that can assist our strengthening of meeting student needs. A training event will be scheduled for the fall...stay tuned!

To meet some of these challenges, the math teachers have developed a Mathematics Teaching Survey that they would like all teachers of mathematics to complete. It takes about 5 minutes and it would help the Vertical Team to plan professional learning opportunities that meet everyone's needs. The survey can be found at: https://www.surveymonkey.com/s/SAU21_Professional_Learning_Summer_Institute

The **Common Core Standards** have been developed to define the knowledge and skills students should have in order to graduate from high school and be able to succeed in entry-level, credit bearing academic college courses and in workforce training programs. See more at <http://www.corestandards.org/>

Science



The Science Vertical Team has focused on the inquiry standards as skills that are important to all of the sciences as well as in any career path where evidence-based decisions and strong arguments are valued. The inquiry standards are also a strong focus of the Next Generation Science Standards, the equivalent of Common Core State Standards. The ability for students to think critically, ask good questions, seek corroborative information and design tests that support their conclusions are skills that will take them beyond their formal schooling. To that end, the Science team plans to:

- Document where there are guided and authentic inquiry activities happening at each grade level
- Work with science teachers to understand how students might pick a focus area and follow that along through the inquiry process – building on that passion as a continuing strand for individual student discovery
- Build Common Core understanding and how the sciences support mathematics, reading and writing standards as well as the Next Generation of Science Standards

This past year the team:

- Began by sharing units/activities/labs that address the enduring inquiry standards.
 - A variety of activities and labs were shared that included different levels of inquiry
 - "Observation Sentence-Starters" were demonstrated as a writing framework to help students organize thoughts related to science work
 - Student use of science notebooks & journals
 - Many online resources—including the National Science Teachers Association for Common Core
 - Whole school inquiry problems such as students looking at how healthy their school is – collecting data on what foods they eat and how much they exercise...including a 4,000 square-foot school garden with a goal of growing their "salad bar"

Ideas shared included an SAU-wide Science Exposition of student inquiry projects and an Institute Day for workshops presented by teachers in district. June 19th includes one for **Inquiry and the Next Generation Standards**, please join us!

Next Generation Science Standards also see:

<http://www.nextgenscience.org/>

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Art



The SAU 21 Art Vertical Team has continued to meet after school to develop the standards and alignment of the art curriculum within our districts and schools. They have developed seven (7) of the standards and have a bit more work to complete the document that will guide our arts teachers.

They are incorporating connections to **Common Core skills** to assist our students in understanding the foundational skills that are important to success in any field. The following are the current **NH Art Standards**.

- Understand and apply media, techniques, processes related to the Visual Arts.
- Know and use the principles of art and elements of design.
- Select and apply a range of subject matter, symbols and ideas.
- Analyze the visual arts in relation to history and culture.
- Analyze, interpret and evaluate their own and others' artwork.
- Students will make connections among the visual arts, other disciplines, and daily life.
- Understand the range of careers in the field of visual arts and identify careers associated with this field.

Although the team has been updating the curriculum around these standards, we are aware that the National Coalition for Core Arts Standards (NCCAS) plans to complete its work and release new, national voluntary arts education standards in fall, 2012. The standards will describe what students should know and be able to do as a result of a quality curricular arts education program. The current National Standards for Arts Education have been adopted or adapted by forty-nine state departments of education. The next generation will support the 21st-century needs of students and teachers, help ensure that all students are college and career ready, and affirm the place of arts education in a balanced core curriculum. The team will continue its curriculum work with even greater support as that document is released.



Mary Kate Pontbriand, 8th Grade Lincoln Akerman School

To keep our students engaged,
persistent and creative!

Music



The music teachers met in early March to review the work started in November and continued with the discussion of Common Standards. The goal is to identify common skill competencies that we can all agree to use. This led to a lengthy discussion about assessment, being able to assess the competencies to which



we were agreeing and what those assessments might entail. Teachers shared some common assessments that they use at Winnacunnet and there was interest from the other teachers in adapting some of these assessments to use with their students. *It should be noted that assessments can be done through student performances, projects, or test-styled responses. They can be rubrics that assist all stakeholders in understanding the learning process so that all evaluations describe where the student is on the learning progression.*

Competencies in agreement include (for end of 4th grade):

- Sing in groups, blending vocal timbres, matching dynamic levels, and responding to the cues of a conductor
- Perform on pitch, in rhythm, with appropriate dynamics and timbre, and maintain a steady tempo
- Create and arrange short songs and instrumental pieces within specified guidelines
- Read whole, half, dotted half, quarter, and eighth notes and rests in 2/4, 3/4, and 4/4 meter signatures
- Use a system (that is, syllables, numbers, or letters) to read simple pitch notation in the treble clef in major keys
- Identify the sounds of different instruments, including many orchestral and band instruments, and instruments from various cultures, as well as differences in children's voices, male and female adult voices
- Identify by genre or style aural examples of music from various historical periods and cultures
- Demonstrate audience behavior appropriate for the context and style of music performed

Successful lessons and activities are being shared and the group agreed to the concept of establishing a library of common lessons and assessments that teachers could use. The alignment of experiences and higher expectations for our students improves their transition into high school and their success in music. **The team meets next on November 6, 2012.**

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The SAU21 Professional Development Committee is now...

The SAU21 Professional Learning Committee

National Professional Learning Standards

Learning Communities: Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

Leadership: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

Resources: Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.

Data: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

Learning Designs: Professional learning that increases educator effectiveness and results for all students, integrates theories, research, and models of human learning to achieve its intended outcomes.

Implementation: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long term change.

Outcomes: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards. For more information see:
<http://www.learningforward.org>

The SAU 21 Professional Development Committee, now known as the Professional Learning Committee, has been meeting since the fall and bi-weekly since January. Members of the Committee represent the five SAU School Districts and the SAU 21 Office.

- Daniel Singer, Teacher, North Hampton School, Chair
- Stephanie Robinson, Special Education Director, Barnard School, South Hampton
- Denise Morrill, Teacher, Seabrook Middle School
- Amy Middleton, Teacher, Lincoln Akerman School, Hampton Falls
- Anne Marie Grigus, Teacher, Seabrook Elementary School
- Karen Schweitzer, Teacher, Winnacunnet High School
- Jamie Marston, Curriculum Coordinator, Winnacunnet High School
- Paula Cushman, Human Resources, SAU 21
- Barbara A. Hopkins, Assistant Superintendent, SAU 21

Part of our work has centered on bringing the SAU 21 Staff Development Process into the 21st century. To this end, we have worked on revising and amending the SAU 21 Professional Development Plan into the SAU 21 Professional Learning Plan. Input was gathered through a survey to the SAU 21 staff and the results compiled and analyzed. One theme that emerged from the survey data was that the plan was too heavily reliant on cumbersome paper work. A large majority of survey respondents also asked for an electronic method of processing and filing of staff development activities. This led us to exploring electronically-based staff development systems. One such system, My Learning Plan, impressed us with its capabilities not only for reducing paper work and consumption, but also, for the ability to foster teacher collaboration and sharing of their professional learning experiences. The SAU 21 Joint Board agreed to implement the system for the upcoming year.

The Professional Learning Committee will be spending the summer learning to use My Learning Plan and planning the training for SAU 21 Staff when they return in August. We are excited about these changes and the positive effect they will have on student learning and achievement in SAU 21! Our ongoing work will be in support of professional learning opportunities across the SAU. One such effort is the Professional Learning Summer Institute scheduled for June 19th at Winnacunnet High School. We have workshops scheduled to assist all teachers with knowledge about the Common Core State Standards and opportunities to share successful practices for student learning.

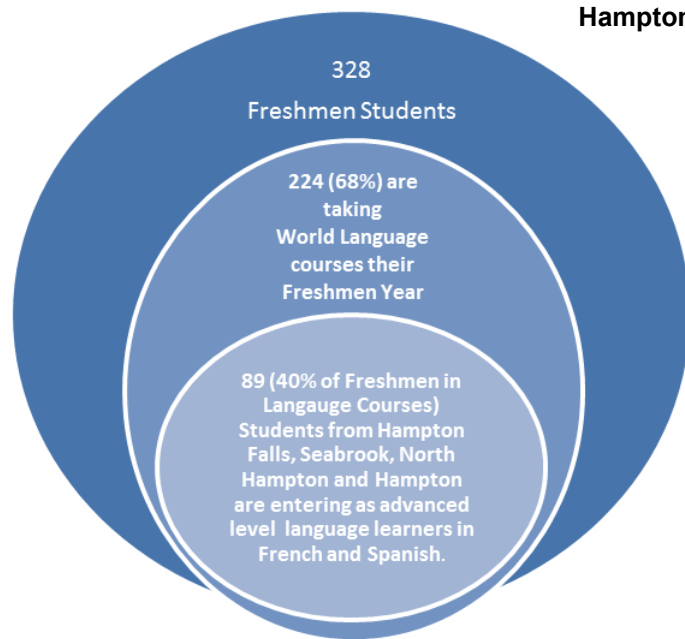
Curriculum Matters...



Team meetings were held and a blog developed to allow participation for all teachers to have ongoing conversations about best practices. The teachers are working to share their World Language curriculum and strategies that help students to become proficient language users. We have discovered variations in terms of access with regard to student learning. The team is seeking opportunities to engage students at younger grade levels in language learning and how to celebrate student successes by examining student performance data as the students proceed at Winnacunnet High School. The team held face-to-face meetings on the early release dates in November and March to discuss their curriculum and the common tests that Winnacunnet uses to establish student placement levels (along with teacher recommendations). The tests are given in early March. The communication work is paying off as more students are qualifying for entrance into Level 2 classes as freshmen. The statistics for next year's entering class is pictured in the chart below.



North Hampton—Brad Johnston & Liz Drinkwater
Hampton Falls—Kathy Jeffreys
Seabrook—Denise Morrill
South Hampton—Frank Brunette
Winnacunnet—Jonathan Cross, Kelley Richards, Ellen Knollmeyer, Briana Kula, Holly Davison, Elsa Upham, Chinca Jimenez and
Team Leader Christine Edgar.
Hampton Academy—Nicole Willcox & Catherine Gmelch



“Working with the Vertical Team this year was a very positive experience for me. Being the only foreign language teacher in my building, I sometimes feel isolated. I loved being able to collaborate and communicate with the other teachers. I have a much better sense of the high school’s foreign language program and feel better equipped to align my curriculum with theirs.”

~Denise Morrill, Seabrook Middle School



Common Core State Standards

The College Career Readiness Standards as well as the K-12 Standards are:

- Aligned with college and work expectations
- Include rigorous content and application of knowledge through high-order skills
- Build upon strengths and lessons of current state standards
- Informed by top-performing countries, so that all students are prepared to succeed in our global economy and society
- Evidence and/or research-based

Learning Progressions Framework with an ELA Focus—this information brought to you by the ELA Vertical Team is valuable for anyone interested in student reading and comprehension. It is an excerpt from Hess, Karin K., (December 2011). *Learning Progressions Frameworks Designed for Use with the Common Core State Standards in English Language Arts & Literacy K-12*.

- **STRAND 1: Reading and Writing Habits & Dispositions**—This strand addresses some of the indicators showing that students are developing habits and dispositions associated with becoming independent readers and writers. These progress indicators include metacognitive and intentional processes controlled by the reader/writer. “Habits and dispositions of reading [and writing] are not something to be “mastered” ...individuals develop and grow as readers [or writers] often as a result of the literacy environment that surrounds them” (Biggam & Itterley, 2009, p.85). This strand is placed first to stress the importance of nurturing positive habits and dispositions within the environment of a literate community, even if not assessed formally. Individual reading logs, writing portfolios, peer- and self-assessments, and conferencing will be the best indicators of progress in this area of literacy.
- **STRAND 2: Reading/Making Meaning at the Word Level**—Making Meaning at the Word Level, presented in this document as the first of three reading strands, is a reminder NOT to limit reading instruction to decoding and “calling” single words, but to encourage students to use a range of skills and strategies to expand their depth and breadth of vocabulary from single-context definitions to deeper conceptual understanding across a variety of texts and contexts. These progress indicators articulate many of the requisite skills and concepts needed for success in the other ELA/literacy strands (e.g., recognizing letter-sound relationships, decoding words and reading with automaticity, determining unknown word meanings). Progress indicators should be taught and reinforced in conjunction with skills and concepts described by other strand indicators, with the goal of building flexibility with a variety of texts.
- **STRAND 3: Reading Literature/Making Meaning at the Text Level**—The skills and concepts described within this strand build upon “word-level” reading skills and integrate with students’ ongoing vocabulary development. Research related to text structures identifies narrative structures (chronology and enumeration/description) as generally less complex than many of the expository text structures. Complexity of literary texts is increased when literary devices and discourse styles are applied (Hess, 2008b). Therefore, literary texts should be introduced early in the K-12 continuum and have differing instructional emphasis at grades K-5 than at grades 6-12. Local curriculum development efforts should consider how the skills and concepts described in the progress indicators can be introduced, practiced, and extended with skills/concepts found in other strands.
- **STRAND 4: Reading Informational Texts/Making Meaning at the Text Level**— As with reading literary texts, these skills and concepts also build on “word-level” reading skills and integrate with students’ ongoing vocabulary development, including use of domain-specific vocabulary. Research related to text complexity and text structure identifies a wide range of expository structures from less complex (sequence, description, definition) to more complex (compare-contrast, cause-effect, problem-solution, proposition-support, critique, and inductive-deductive) (Hess, 2008b). Informational texts need to be introduced early in the K-12 continuum and have increasingly more instructional emphasis by high school. The curriculum should consider how the skills and concepts described by progress indicators can be introduced, practiced, and extended with skills/concepts found in the other strands.

Our next CCSS report will target the Writing strands! If you are interested in the full article go to: http://www.nciea.org/publication_PDFs/ELA_LPF_12%202011_final.pdf

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The monthly meetings have been terrific for sharing new ideas as well as trying to determine standards that all of the schools can agree upon. This spring the Library & Media Specialists have focused on sharing resources and experiences with a variety of vendors and systems.



- ⇒ eBooks: This represents one area that was explored for a variety of reasons. From economics to user-friendliness, the team shared how some resources are more user-friendly than others. The group's collective experiences helped to develop a greater understanding of the available systems and which are more helpful for organizing or allow for books from multiple companies to be displayed. *FollettShelf*, *Gumdrop* and *Marshall Cavendish* were all discussed. The team also learned that "unlimited access" doesn't necessarily mean whole classes could use them. The team members accomplished a deeper critique of eBook systems. Highlights include:
- Students can access fiction eBooks through the state library using "Overdrive." They will need their library card.
 - There's an iPad app for classic eBooks.
 - One librarian/media specialist teamed up with an 8th grade teacher for a lesson using the ebooks. After completing the activity the students were asked if they liked using the ebooks and the majority of them said they preferred a print book so they can flip back and forth easier, etc. However the students did like that chapters can be read at night from home or the computer lab!
 - The recommendation from the team was to sit down with teachers and plan with them, choosing the best eBooks to buy.
- ⇒ New Features for *Destiny*, the searchable electronic catalogue system used in all of our schools was discussed and demonstrated. This included:
- *Titlewave* which can be used to evaluate collections within the *Destiny* system.
 - A review of Resource Lists and how they are used.
 - *Destiny Quest* also has an app now (registration required).
 - How students can scan books into a topical list and the use of *Novelist* to assist students in choosing books they might enjoy. These student lists can also inform library purchases that are patron friendly.
- ⇒ Other discussions included:
- Digital Resources: *Study Island*, *Live Binders*, *Diego*, use of *Mahara* for web-based digital portfolios, *Glogster*, *Bookflick*, *Trueflix*, *Grolier* and Scholastic's *Book Wizard*
 - Technology hardware issues focused on tablets and printing. One school eliminated color printing and the cost savings in ink has been huge! Students that want to print in color must print it at home.
 - Standards that we can all agree upon.
 - Citation of sources was suggested but at some schools this is handled in the classrooms within assignments and the teachers have taken it over. The benefits of using *EasyBib* has changed the teaching of this concept considerably. Now students can simply type in a title, choose from a list of books for the correct one, and it fills in the rest of the information. Both *Noodletools* and *EasyBib* use MLA which is the agreed upon standards for citation in most schools and Winnacunnet.
 - We agreed that we could create a standard based on database usage and the common factor would be EBSCO databases.
- ⇒ IPADS: Some schools are now checking out iPads to teachers for student use. There are some frustrations and kinks being worked out. Specialists recommend downloading things onto a main computer and then syncing the iPads to the main computer. That way everyone can share the same apps and downloads. iTunes books and audible.com are used for downloads.
- ⇒ Recommendations:
- Ryan Higgins (local picture book author) visits the younger students. He comes for free in hopes to sell his book, *Twaddleton's Cheese*.
 - Len Cabral is a storyteller who is wonderful. He spent 2-3 days at one school where he did storytelling, with a focus on personal narrative.
 - One specialist did 3 Skypes for World Read Aloud Day. She went through *Lit World* and many of the Skypes are free. The authors that Skyped with classes included: Patricia MacLachlan and C. Alexander London (writes *We Are Not Eaten by Yaks*). For a video chat, our specialists recommends the author share their pets.
 - *Akimbo and the Lions* is a series by Alex McCall Smith. One school is using it with 3rd graders as a jumping off point for research. It is set in Africa then they are researching African animals. They are doing this by making their own books to learn the parts of a book, with their research inside.
 - For those readers who loved *The Hunger Games* try the series, *Conspiracy 365*.

