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Curriculum Matters...

Transformative Work by the Faculty and Students of SAU 21

New Professional Learning and Educator Appraisal Plans begin 2014-2015

The entire SAU21 professional staff began this year with two new master plans focused on student learning. The plans were developed through the work of two committees representing the educators of all schools and school board representatives The committees met over the last two years in discussions about what made a difference in the learning and growth of teachers and how we could align with the recommendations of the state task force on educator effectiveness.

Representatives shared the ways that helped them to grow and use more effective strategies for students' learning. Professional workshops or seminars that provided direct linkages to their teaching and student learning were also acknowledged as valuable and generative. They valued ongoing discussions with their supervisors and opportunities to confer with other teachers in their classrooms and other schools. This provided the groundwork for the new plans and a unanimous shift of the new Appraisal system from one administrator observation to 10 mini-observations in the credentialing year, to offer an ongoing dialogue between the educator and administrator. Administrators also realized that this shift would offer greater knowledge about the classroom environment, learning tasks for students, and the curriculum flow of classrooms throughout the year. Additionally, a self-assessment by educators on a professional rubric would offer an ongoing dialogue that would inform areas in need of growth for professional development goals and/or in-service workshops. The Appraisal plan also includes three collegial visits, a reflection upon student survey results (which will be researched and developed in 2015), and the identification of two Student Learning Objectives (SLOs). This year will be our first year using the plans and is considered Phase 1 as we review how the plans are working. The Appraisal Committee is meeting this year to make adjustments in order to strengthen and improve the process.

The new Professional Learning Plan was also adjusted to fortify goal alignment between schools and educators, and to assist in goal development that improves student learning. To that end, the Professional Learning Committee has assisted in the training and coaching of goals written using a SMART format (Specific, Measureable, Achievable, Rigorous and Timebound). This work is ongoing and has assisted in the development of the Student Learning Objectives (SLOs) which must be in place for the Appraisal Plan by the 2015-2016 academic year. Please see the SAU 21 website for the plans and other helpful sites. This issue of Curriculum Matters will provide a focus on the Student Learning goals being addressed by the SAU21 Vertical Curriculum Teams. Although the teams are in various stages of developing these goals, their primary objective is to create space for the sharing of both challenges and best practices for their respective areas across districts and grade levels. In general, their chosen focus represents a collegial effort to improve student learning in a specific area. The focus is a result of many hours of dialogue and collaboration as educators share student work, analyze common performance assessments, and discuss the needs for improved student achievement. To that end, Curriculum Matters provides a venue for educators to share aspirations for student learning with parents and the larger community. We invite you to learn with us as we continue our quest for excellence in learning for all of our SAU 21 students.
Please visit the **SAU21.org** website to learn more. They say "It takes a village to raise a child" and we hope this issue provides you with some of your own discoveries that may assist in learning with your children or be able to ask questions that assist your own understanding.

Example of a SMART-formatted goal: To increase the performance of all 8th grade students in science through an increased focus on "using evidence to support experimental inferences and conclusions." Students will show an increase in performance validated by the following assessments: the SAU21 Inquiry Practices Rubric, NECAP Science Assessment and laboratory report score sheets throughout the academic year.

Example of a rigorous SLO: Utilizing the example above, the SLO would state specific targets for one or more of the assessments utilized. For example the educator could target a particular % rise in the proficient or proficient with distinction categories of the NECAP Science Assessment or that 85% of the students would increase their inquiry practices rating.

What is a rubric? See page 8

World Languages

There have been many changes to World Languages this year. We have changed our grading to be completely proficiency-based at Winnacunnet, so that student achievement is now measured in terms of the four individual components of language-learning: **Speaking, Listening, Reading and Writing.**

The focus on proficiencies has encouraged teachers to adjust the way in which students are assessed and how the content instruction is orchestrated. Teachers are now re-evaluating existing assessments to isolate students' strengths and weaknesses within individual language skills, and with consideration for the depth of knowledge that the assessments are measuring. The changes have also compelled teachers to be more balanced in the amount of instructional and assessment time devoted to each of the four language skill areas. For example, many teachers are assessing language speaking skills more regularly by taking advantage of online audio recording tools to record student speaking. Teachers are able to have all students record their speaking based on questions or a prompt, and assess them later. Compared to having short "live" conversations with individual students, this takes far less time, makes regular assessment more feasible, and allows for teachers to more effectively measure growth.

World language teachers have also adapted to a method of assessment that is strictly rubric-based. By providing students with rubrics for each proficiency in advance, it allows for more self-assessment, goal-setting, as well as a clearer indication of what proficiency looks like for students.

Work by the World Language teachers has not been limited to just the classrooms, and there are many very exciting things happening beyond the school walls. At Winnacunnet, a language and immersion program to the Osa Peninsula of Costa Rica is now in its third year and interest in the program is high. World Language teachers recently organized the 6th annual "Culture Matters" event, during which students were presented with music and history of New Orleans music by the 'Folksoul Band.'

Spanish 5 students will be visiting sending-schools in the district to provide enrichment for elementary students. Last year's visits to third grade students in Seabrook was very successful, and this year students will be making weekly visits to some of the 4th and 5th grade classes.

Continued work for the remainder of the school year will include a focus on Student Learning Objectives (SLOs), Quality Performance Assessments (QPAs), World Travel Day at WHS, and revision of rubrics and course frameworks to adjust to year-long courses.

WHS teachers are working closely with our sending school teachers through our SAU21 Vertical Team to assist a continuous focus and review of our students' knowledge and skills. Collaboration is most important and assists us in having common expectations for performance. The middle school educators are studying the new high school cultural studies progression and assessment strategies to find ways of initiating them through k-8 experiences. As the schools learn to work more as one, our students will benefit from a more seamless transition to high school Spanish and a more effective world language program overall. The following pages highlight some of the curricular happenings in our district schools.

World Languages

Lincoln Ackerman School has two Spanish teachers sharing responsibilities across the grade levels. The collaboration has helped to develop a dynamic program which begins to build children's awareness towards a more academically focused middle school program.

Grade 1 is learning the Spanish alphabet through singing and movement.

Grade 2 is learning the Spanish colors and numbers from 1 - 20.
Grade 3 has done a variety of activities to learn and practice advanced numbers and days of the week. We are starting to learn vocabulary for animals and pets while incorporating forms of the verb TENER - to have.

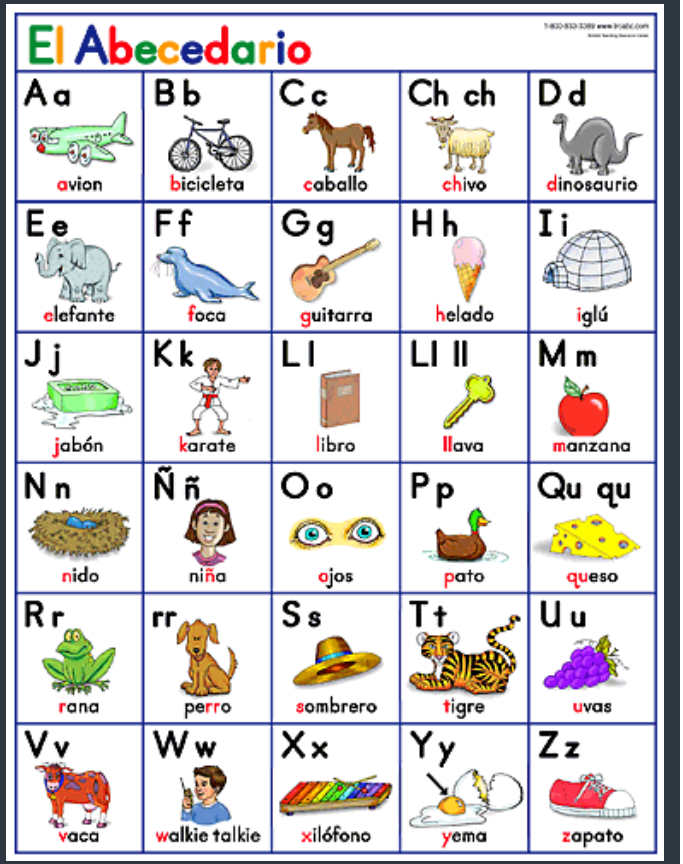
Grade 4 is using games to practice class object vocab - incorporating numbers and adjective placement and agreement.

Grade 5 enjoys performing mini skits-making appointments (incorporating days, dates, times, greetings)

Grade 5 & 6-immigration, migrant workers, read age appropriate biography of Cesar Chavez (National Association of Farm Workers), discussed working conditions of migrant workers, in small groups discussed scenarios immigrants might encounter

Grade 7 is reading Spanish stories about a coyote and a crow. The teaching method is called, "TPRS" or Teaching Proficiency through Reading and Storytelling. Spanish students enjoy the cartoon-style of the workbook which is exceptionally user-friendly.

Grade 8 -students are working in depth with the verb, "ser" which means "to be". These students have produced Spanish assignments describing themselves, others and famous people.



At Seabrook Middle School

Spanish is a year-long 8th grade class. While students are focused mainly on reading, writing and speaking with basic grammar and common vocabulary, we also explore Hispanic culture and geography. In the fall, we finished up a unit on Mexico with a "Dia de Los Muertos" celebration. The students made traditional sugar skull candies and we feasted on native Mexican foods!

World Languages

The Barnard School entered into a partnership with VLACS to provide more individualized instruction with rigor and flexibility. VLACS (Virtual Learning Academy Charter School www.vlacs.org) was founded in 2007 as an alternative for students of Middle and High School age with over 125 instructors teaching over 100 courses in all disciplines including those offering college credit. They now accommodate thousands of part and full-time students free of charge to NH residents.

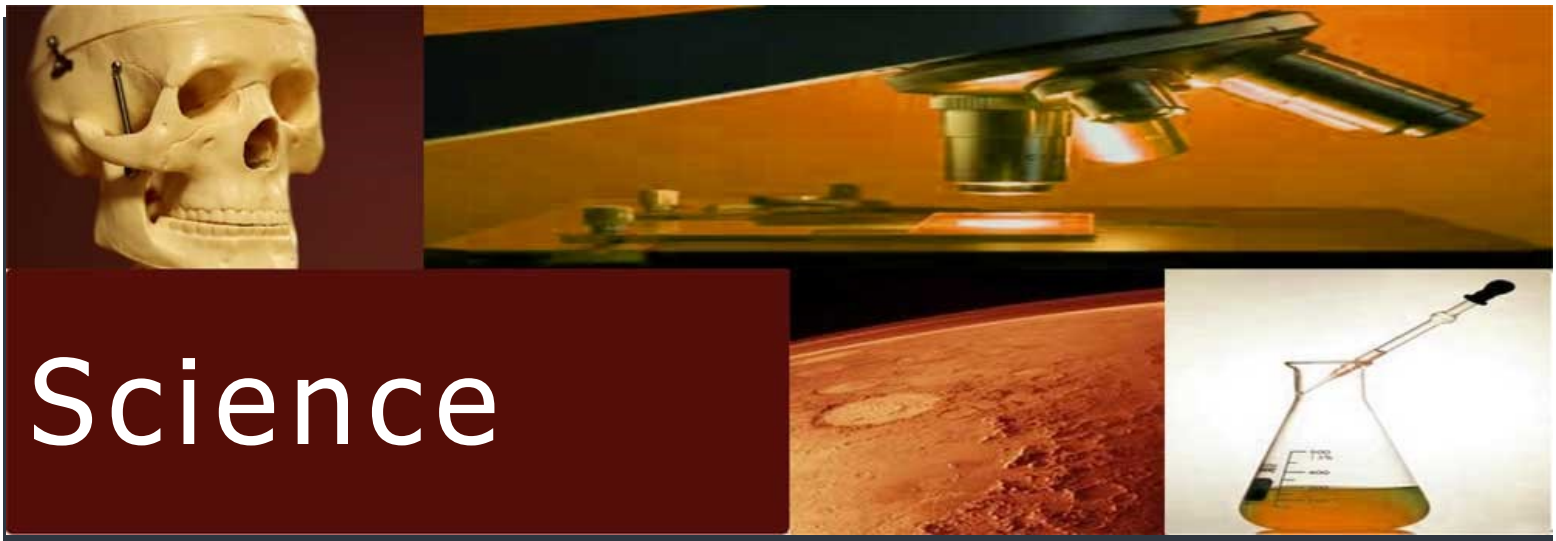
This year, due to a staff leave of absence, we have taken the partnership to a whole new level offering Middle School Spanish to nine 7th and 8th Graders. During 3 class periods weekly students go online, take instruction, and complete assignments much like those offered at hundreds of Institutes of Higher Ed across the US and beyond. Each student works at a laptop wearing earphones with microphones to allow practice and completion of verbal assignments, and they and parents interact frequently with their certified instructor via phone, email, and occasionally live with video via "Adobe Classroom Connect" for assessments and feedback.

One deviation from VLACS' conventional online experience has been the recent addition of a tutor, a graduate assistant and Masters candidate, recruited from the Spanish Department at UNH. This allowed us to continue with the program with support from a qualified individual to help students who hit the occasional rough spot and to act as liaison to the instructor. This assisted our Middle School children in their transition to the virtual learning environment.

We are very happy with our VLACS partnership and look forward to additional opportunities in the future for Barnard students and South Hampton residents attending Amesbury High School and other schools. If you would like further information contact VLACS (http://vlacs.org/) directly or contact Ken Darsney, Barnard School Principal, kdarsney@sau21.org.

In the K-5 **Spanish program at North Hampton School**, students are putting their Spanish knowledge to the test and stretching their pronunciation muscles. Students in third grade are working collaboratively to write their own news/weather forecasts relative to the climate in the Latin American world. Scripts are peer reviewed and fellow classmates assess each student's pronunciation, inspiring self-reflection and self-awareness and yielding greater accuracy. Fifth grade is working on expressing likes and dislikes ((no) me gusta) (me da asco, (no) me cae bien, me encanta, me fascina) giving them an increased flexibility and complexity in the Spanish language. In Kindergarten, students are learning the Spanish alphabet and learning to spell in Spanish, setting the framework for increased comprehension and more accurate pronunciation.

At the North Hampton Middle School, eighth graders are learning how to give informal commands. These commands will provide the foundation for step-by-step demonstrations - on topics of their choice - that they will soon perform for their classmates. Seventh graders are working on extending invitations and incorporating these skills into phone dialogues. In the sixth grade, students are mastering the question words and conducting interviews about school problems. All of these middle school performances will be filmed and replayed so students can assess their own effectiveness as communicators in the target language.



Science

The Science Vertical Team continues to move forward in developing a rubric intended to communicate pathways towards essential scientific skills and document students' progress over the course of their middle school years regarding their reading of scientific texts, use of scientific equipment, and other critical habits of mind as science students. These efforts align well with other Curriculum Teams and a stronger focus on evidence and application. We encourage your understanding of this rubric as a fluid document that may adjust over time as a unilateral effort of the SAU21 Curriculum Team. We will use this as a communication tool to assist in defining some of the important competencies necessary for successful work in science and many other subjects or career areas. It celebrates a healthy skepticism and a commitment to using evidence for understanding. This evidence may be bound in resources as students are learning about science, but is also important in doing the experimental work that builds their personal scientific knowledge.

Winnacunnet high school science teachers have also been adjusting their science curriculum and methods for assessing student competencies. The SAU21 Science Team continues as a convening group that improves the learning success of our students as they matriculate through the middle grades to the high school. Although the competencies might look a bit different through the grade areas and particular disciplines of science (i.e. life, earth/space or physical sciences), they should provide students with the leverage that assists success in any field area.

As we unpack the needs of our students to learn science by doing science, we are reminded that our students need more experiences in problem solving, using tools to extract data and other evidence to make decisions about potential solutions, and persisting when challenges are not easily solved. Our students are our future! We invite our colleagues, parents and students to consider the exuberance one feels when a really tough problem is overcome, as we continue to plan for these types of experiences for our science students. The initial strands of our rubric include skills valuable in all scientific disciplines:

- *Formulating Questions and Hypothesizing*
- *Planning and Critiquing Investigations*
- *Conducting Investigations*
- *Developing and Evaluating Explanations*
- *Lab Work*
- *Ethic and Accountability*

In.quir.y *n.*

1: a search for knowledge; 2: an instance of questioning; 3: a systematic investigation of a matter in a search for information or truth.[1]

We will begin using the completed rubric with our students this year and realize that the data we collect this 2014-2015 school year is just a beginning. As we continue to meet and review our students' work, we will modify and edit the rubric to become a more viable tool for our students and our goal of excellence in science learning. It's utility for shared outcomes and high expectations for student learning will improve as we share student work and continue to push our students in the areas of scientific inquiry and problem solving.

Language Arts

The **English Language Arts teachers** have met four times so far this year and have set a goal of meeting a total of seven times. It is great to have some new faces and to be back together with some of us who have been in the group for several years. We reviewed and discussed the collaborative work that we completed during the 2013-2014 school year: the study of the Common Core writing standards, our use of common on-demand writing prompts, the experience of analyzing student writing samples, and the creation of a common rubric for Argument writing.

We then set goals for the 2014-2015 year with the central focus being on the reading standards established in the NH College and Career-Ready Standards. One emphasis will be on **analyzing complex texts**: how do we know that a text is complex? We all want to learn how to use the triangular method of text complexity analysis; this combines Lexile scores, qualitative data along with the reader and the task. Are we increasing the level of rigor and complexity across the grade levels? We want to increase our understanding of how close reading impacts comprehension and assessment by learning how to **create text dependent questions**. We will also share ways that we are preparing students for the reading demands of the **Smarter Balanced Assessment**; for instance, students learning how to use multiple text resources at once while synthesizing information. We will tackle the question of how to **balance a love and habit of reading with text-based assessments and close reading strategies.** These are all important to the growth and development of our students.

At our Professional Development afternoon on November 7th, the group discussed and shared the work we each have done with Student Learning Objectives to this point. During our time together, we looked at samples, blank templates, and gave teachers time to work on their own. We also had time to share the argumentative writing rubric that we created last year to illustrate that some SLO's can be individual and some can be similar across the district.

The collaborative work that we undertake is a valuable component of professional growth. It is wonderful to have so many dedicated educators working together for the benefit of the students of SAU 21. We look forward to another other productive year
together.

Here are the elements we identified for Argumentative writing…

- Statement of Purpose/Focus
- Organization
- Elaboration of Evidence
- Language and Vocabulary
- Conventions

Grades 6-12: Generic 4-Point Argumentative Writing Rubric

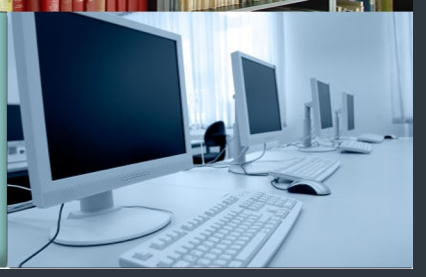
Score	Statement of Purpose/Focus and Organization		Development: Language and Elaboration of Evidence		Conventions
	Statement of Purpose/Focus	Organization	Elaboration of Evidence	Language and Vocabulary	
4	The response is fully sustained and consistently and purposefully focused: • claim is clearly stated, focused and strongly maintained • alternate or opposing claims are clearly addressed* • claim is introduced and communicated clearly within the context	The response has a clear and effective organizational structure creating unity and completeness: • effective, consistent use of a variety of transitional strategies • logical progression of ideas from beginning to end • effective introduction and conclusion for audience and purpose • strong connections among ideas, with some syntactic variety	The response provides thorough and convincing support/evidence for the writer's claim that includes the effective use of sources, facts, and details. The response achieves substantial depth that is specific and relevant: • use of evidence from sources is smoothly integrated, comprehensive, relevant, and concrete • effective use of a variety of elaborative	The response clearly and effectively expresses ideas, using precise language: • use of academic and domain-specific vocabulary is clearly appropriate for the audience and purpose	The response demonstrates a strong command of conventions: • few, if any, errors are present in usage and sentence formation • effective and consistent use of punctuation, capitalization, and spelling
3	The response is adequately sustained and generally focused: • claim is clear and for the most part maintained, though some loosely related material may be present • context provided for the claim is adequate	The response has an evident organizational structure and a sense of completeness, though there may be minor flaws and some ideas may be loosely connected: • adequate use of transitional strategies with some variety • adequate progression of ideas from beginning to end • adequate introduction and conclusion • adequate, if slightly inconsistent, connection among ideas	The response provides adequate support/evidence for writer's claim that includes the use of sources, facts, and details. The response achieves some depth and specificity but is predominantly general: • some evidence from sources is integrated, though citations may be general or imprecise • adequate use of some elaborative techniques	The response adequately expresses ideas, employing a mix of precise with more general language: • use of domain-specific vocabulary is generally appropriate for the audience and purpose	The response demonstrates an adequate command of conventions: • some errors in usage and sentence formation may be present, but no systematic pattern of errors is displayed • adequate use of punctuation, capitalization, and spelling
2	The response is somewhat sustained and may have a minor drift in focus: • may be clearly focused on the claim but is insufficiently sustained • claim on the issue may be somewhat unclear and unfocused	The response has an inconsistent organizational structure, and flaws are evident: • inconsistent use of basic transitional strategies with little variety • uneven progression of ideas from beginning to end • conclusion and introduction, if present, are weak • weak connection among ideas	The response provides uneven, cursory support/evidence for the writer's claim that includes partial or uneven use of sources, facts, and details, and achieves little depth: • evidence from sources is weakly integrated, and citations, if present, are uneven • weak or uneven use of elaborative techniques	The response expresses ideas unevenly, using simplistic language: • use of domain-specific vocabulary may at times be inappropriate for the audience and purpose	The response demonstrates a partial command of conventions: • frequent errors in usage may obscure meaning • inconsistent use of punctuation, capitalization, and spelling
1	The response may be related to the purpose but may offer little relevant detail: • may be very brief • may have a major drift • claim may be confusing or ambiguous	The response has little or no discernible organizational structure: • few or no transitional strategies are evident • frequent extraneous ideas may intrude	The response provides minimal support/evidence for the writer's claim that includes little or no use of sources, facts, and details: • use of evidence from sources is minimal, absent, in error, or irrelevant	The response expression of ideas is vague, lacks clarity, or is confusing: • uses limited language or domain-specific vocabulary • may have little sense of audience and purpose	The response demonstrates a lack of command of conventions: • errors are frequent and severe and meaning is often obscure
0	A response gets no credit if it provides no evidence of the ability to [fill in with key language from the intended target].				

*Begins in 7th grade

Please see the last 2 pages for pertinent grade level vocabulary for grades 3-12

Physical Education

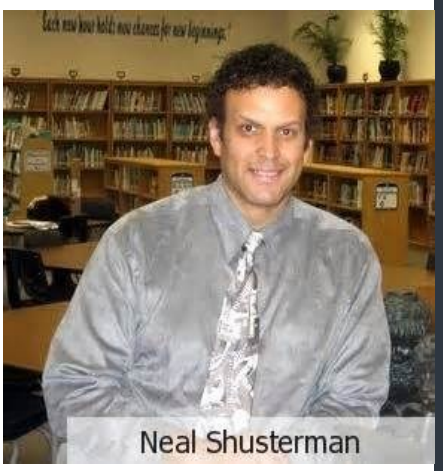
Library / Media



On November 7th, Physical Education and Health teachers attended a general presentation on Student Learning Objectives (SLOs) and then met with Pat Degon, former director of PE/Health at the Shrewsbury School District in Massachusetts. Pat helped us to debrief the SLO workshop that we attended earlier in the afternoon. She was able to answer a lot of the questions and concerns that we had as she has been through this process with her previous school district. We want to be sure that the SLO's we create are student-based, friendly and meaningful for everyone (student, parents, administration and us). We discussed the needs of our students and discussed the various types of data that we could collect that would help us to know and help students improve in those needed areas.

We are looking forward to having Pat Degon back in April for our next early release day.

Hawley Library at Winnacunnet HS has had many exciting events going on throughout the first trimester of school. The highlight of the fall season was a visit to WHS by the award winning storyman, Neal Shusterman, the author of the Unwind series. Mr. Shusterman spoke to WHS 9th graders and 8th graders from North Hampton, Hampton Falls, and Seabrook. Incoming freshman at the high school had read Unwind as their required summer reading and many of the 8th graders had read one of his many titles. Students were very engaged as they asked Mr. Shusterman many questions about his writing process and how he generates his ideas for his books. Prior to his speaking to the audience of nearly 500 students, Mr. Shusterman, had lunch at Hawley Library with WHS students who had won a contest describing their favorite character in Unwind and staff members. In a relaxed setting, students were able to ask questions and discuss some of the ideas brought forward in his stories. At the close of the lunch, students were treated to a reading by Mr. Shusterman from his latest writing, which had not been publicly presented before. With the coming of his next books, these students will be able to say they heard it first at Hawley Library from the author himself, an exciting opportunity for these students. More information about Neal Shusterman and his books can be found at storyman.com.


Neal Shusterman

Curriculum Matters is a communication tool for SAU 21 teachers, parents, and community members. It provides a mechanism for the Vertical Curriculum Teams to share their efforts to build a coordinated curriculum that enhances the learning opportunities and performance of all students. Please learn with us as we embark on these efforts and look for opportunities that align across disciplines. We encourage our larger community to follow some of the **web** links to see how our work is influenced and to help students understand how to do their very best in learning. Please direct any questions or suggestions to the SAU 21 office at 926-8992 x105. We appreciate your input .

Reading / literacy

The SAU 21 Reading Specialists' Vertical Team has met several times this fall. They reflected upon last year's efforts in a collaborative book study of *The Book Whisperer* by Donalyn Miller. Our goals this year are to make better use of our students' reading assessments through Performance Pathways (PP) as a data tool to track student growth and to intervene with students who might not be advancing. Although we are a fairly new vertical team, we are already accustomed to using our own assessments to track student progress. Our team had already chosen a goal for 2014-15, which was to become trained in using Performance Pathways. This training will allow us to access historical data about our students so we are better able to diagnose reading issues, establish interventions, and monitor their progress over time. We believe we can provide more specific and effective interventions by knowing more about the children we support. The performance tracking tools will increase our effectiveness in supporting our students' growth across grade levels.

After an extended discussion, the team settled on a common concern about the "close reading" of text. We are adapting the Extended-Response Reading Rubric for use across our schools. We are also planning on using the Frye sight word lists to a small sample of students K-12, then scoring the results on a growth-oriented rubric. The Frye Sight Word Lists are an objective assessment that we can use throughout the school year.

These assessments tied to the Smarter Balanced Assessment and NWEA data will enable us to triangulate results from multiple measures or aspects of our students' learning. The PP training provides a centralized program so we can look for patterns in student performance and cohort progress. For those students matriculating to Winnacunnet, reading teachers will also be able to see ongoing performance for an assessment of our students' continued growth.

Extended-Response Reading Rubric

	4	3	2	1
Comprehend 	I demonstrate understanding by explaining the key ideas from the text, both stated and unstated.	I demonstrate understanding by explaining some key ideas from the text, both stated and unstated.	I demonstrate understanding by explaining only the stated or unstated key ideas from the text.	I explain little or nothing from the text.
Interpret and Connect 	I use information from the text to interpret or connect the text to other situations or texts through analysis, evaluation, inference or comparison.	I use information from the text to interpret or connect the text to other situations or texts, but there are some gaps in my analysis, evaluation, inference or comparison.	I use information from the text with little or no interpretation (a summary).	I use inaccurate, unimportant, or no text examples.
Provide Examples from the Text 	I include specific text examples and important details to support fully my explanation.	I include some examples and important details to support my explanation, but they may not be specific.	I include only limited text examples to support my explanation.	I write too little to show understanding of the text.
Balance Ideas 	I effectively weave text examples into my interpretation.	I partially weave text examples into my interpretation.	I use mostly the author's ideas or mostly my own ideas (unbalanced).	

Why Use Rubrics?

Rubrics can improve student performance, as well as monitor it, by clarifying teachers' expectations and by showing students a pathway to meet these expectations. The result is often marked improvements in the quality of student work and learning.[1] Rubrics are also used as self-assessments by students offering explicit details that promote their growth. They are formative tools for teachers and parents, used to inform instruction and chart student growth. Here's a segment of a performance rubric:

Use of Tools	Student chooses and uses tools with precision. The student demonstrates and can communicates why that tool is best for the task. Student assists others in using tools appropriately.	Student chooses and uses tools appropriately most of the time. Student can communicate why the chosen tool is best for an application.	Student chooses and uses tools appropriately when reminded. Student might ask a friend for assistance.	Student often plays or misuses tools. Student does not choose appropriate tools for the task. Student doesn't ask for assistance when needed.
Working with Others	Student is always an engaged partner, listening to suggestions of others, contributing ideas, and working cooperatively to accomplish tasks with high quality results.	Student is an engaged team member but occasionally has trouble listening to others and/or working cooperatively.	Student may cooperate with others, but needs prompting to stay on-task.	Student does not work productively with others. The student's actions deter group progress on a task.

***See https://learnweb.harvard.edu/alps/thinking/docs/rubricar.htm**

Throughout the summer and fall the Math Vertical team developed three numeracy assessments (one per term) that students will take during Pre-Algebra/Algebra 1. We also revised the Math Habits rubric* to be more aligned with the Common Core Math Practices and revised the end of term common assessment. This provides us with multiple perspectives of our students' learning.

Through the numeracy assessments we are looking for our students' strengths and challenges across grade levels, schools and mathematical areas. This information defines areas that we need to focus on throughout our schools, as well as documenting student growth over time. We are using Performance Pathways as a data tool to help us understand our students' learning more clearly and to personalize our teaching to meet those challenges.

The Math Habits rubric describes some of the "Habits" of mind that generate greater success for our students. Students can use the rubric to assess themselves and engage in learning conferences with their teacher. We have revised the rubric from the end of last year to be more aligned with the Common Core Practices in Mathematics. These practices are essential for developing competency and fluency in mathematics at all levels. Students assess themselves, meet with their teachers and set goals for areas that they would like to improve. See the different areas we are assessing below and read about the Mathematical Practices online.* Students and teachers will collect this formative data at least twice during the year. Many of our teachers are also using these assessments as the evidence behind their Student Learning Objectives as last year's data demonstrated a strong correlation to student performance on standardized math assessments. We will continue to examine that relationship.

We have also been working to revise the common final exam for each of the three terms for Algebra 1. Students in Seabrook, Hampton Falls, and North Hampton all had a chance to take the test online. The purpose of this was to be able to efficiently collect information on student performance and give students an opportunity to take an online assessment before the Smarter Balance assessment in the Spring. Throughout the year we will continue to share the outcomes of our work through different projects and sharing of student work that is happening throughout the SAU.

The SAU 21 Math Practices Rubric includes the following areas:

Active Engagement in Learning

Ask yourself the following questions: What materials do I need? What do I need to do in advance to be prepared? What am I responsible for? Who can I ask for help? How can I best use the time given in class? How am I going to best meet deadlines that are given to me, both for short-term and long-term projects?

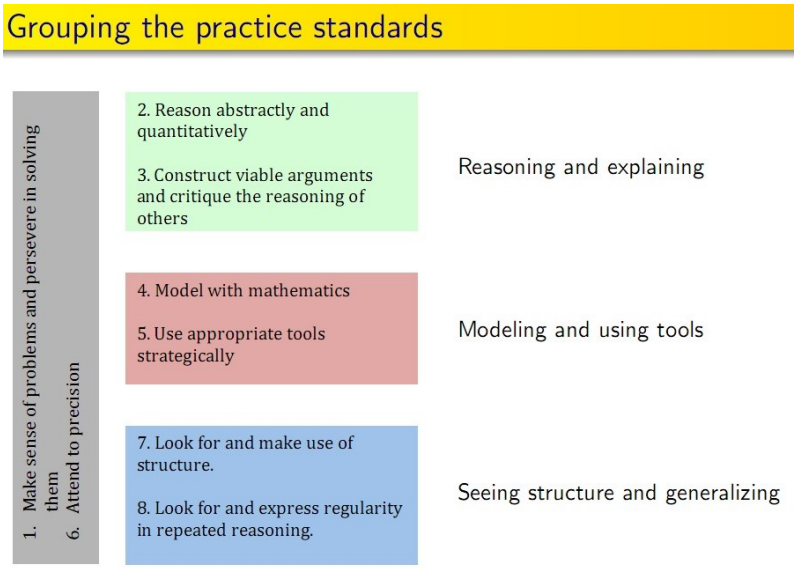
Organization & Attending to Precision

Mathematics utilizes symbols and structure in the communication of relationships. The organization of your work and precision in process are important.
Consider the following questions: What is the best system for me to find solutions? Is this the best way to layout my work so I can communicate my findings or reference/study it later?

Conscientiousness

Ask yourself the following questions: How am I going to demonstrate my best effort? What does my best effort look like? Have I completed work that I am proud of and that is of high quality?

Commitment /Perseverance: Make sense of problems and persevere in solving them. Ask yourself the following questions: How do I challenge myself? Do I keep going when things get difficult? What strategies do I use when things get difficult? How do I overcome obstacles?



**Read about the Mathematical Practices @ http://www.corestandards.org/Math/Practice/

In collaboration with the UNH College of Engineering and Physical Sciences, the UNH Leitzel Center for Mathematics, Science and Engineering Education, the UNH Education Department and Heinemann Publishing Company, the Southeaster's CIA Group of New Hampshire present:

The Mindset Revolution: How to Teach or Parent for a Growth Mindset and Drastically Increase Math Achievement for Students of All Ages

Jo Boaler, Stanford University
CEO & cofounder: youcubed

In recent years scientific studies have demonstrated that student and teacher 'mindsets' have a profound impact on learning. Students with a 'growth mindset' (Dweck, 2006) who believe that intelligence and 'smartness' can be learned and that the brain can grow from exercise learn more effectively, displaying a desire for challenge and showing resilience in the face of failure. Such behaviors encourage greater math persistence, engagement and high achievement. Mathematics teachers play a critical role in the development of mindsets and this session will review the ways to teach for a growth mindset, including attention to classroom norms, math tasks, questions and assessment.

SAVE THE DATES!!!

In this **evening keynote session (7-9pm, Thursday Evening, April 2, 2015 @ Exeter High School Auditorium)** Jo will share recent and important research on the brain and mathematics learning that has profound implications for students' mathematics achievement at all levels. This session is geared for K-12 teachers, parents, higher education, and educational leaders.

In the **day-long workshop (8:30am-3pm, Friday, April 3, 2015 @ the Elliott Alumni Center, UNH, Durham, NH)** we will consider together what it means to teach math for a growth mindset. We will look together at different mathematics tasks, different forms of assessment and grading, grouping arrangements, encouragement and praise, and many other aspects of mathematics teaching. We will do this through classroom videos and through working on math tasks together. This session is specifically targeted to Middle and High School Mathematics Teachers.
To Register: https://www.surveymonkey.com/s/JoBoalerMathematicsMindsetRegistration or the QR code to the right.

Dr. Jo Boaler is a Professor of Mathematics Education at Stanford University, and the co-founder of youcubed. She is also the editor of the Research Commentary Section of *The Journal for Research in Mathematics Education* (JRME), an analyst for PISA testing in the OECD, and author of the first MOOC on mathematics teaching and learning. Former roles have included being the Marie Curie Professor of Mathematics Education for Europe, a mathematics teacher in London comprehensive schools and a researcher at King's College, London. Her PhD won the national award for educational research in the UK and her book: *Experiencing School Mathematics* won the 'Outstanding Book of the Year' award for education in Britain. She is an elected fellow of the Royal Society of Arts (Great Britain), and a former president of the International Organization for Women and Mathematics Education (IOWME). She is the recipient of a National Science Foundation 'Early Career Award' and the NCSM Kay Gilliland Equity Award (2014). She is the author of nine books and numerous research articles. Her latest books *What's Math Got To Do With It?* (2009) published by Penguin, USA and *The Elephant in the Classroom* (2010) published by Souvenir Press, UK, both aim to increase public understanding of the importance of good mathematics teaching. She serves as an advisor to several Silicon Valley companies, and a White House presenter on girls and STEM. She recently formed www.youcubed.org to give teachers and parents the resources and ideas they need to inspire and excite students about mathematics.
Websites: http://www.youcubed.org www.joboaler.com http://ed.stanford.edu/faculty/joboaler


Tech Engineering

What's a fun learning experience in engineering for students in grades 2-5? Why it's KEEPERS of course!

Kids Eager for Engineering Programs with Elementary Research-based Science*

The Tech/Engineering group is just getting started, but Jim Muthig (Winnacunnet), Tara Moran and Carmelina Cestrone (Barnard) and Steffie Stempien (North Hampton) are on a mission to grow students' knowledge, appreciation, and skills in engineering design by collaborating on a summer opportunity for Seacoast area students. KEEPERS reminds us that the young people in our elementary schools have incredible potential to change the world! They are indeed...KEEPERS!

Originally designed as a summer day-camp experience at UNH, KEEPERS has been attended by many youngsters since it's beginning in 2003. Each day of the program features a different type of engineering; including Chemical, Civil, Electrical, Environmental and Mechanical Engineering that is introduced to the children via guest speakers, hands-on demonstrations, and a lot of materials and concept testing with a strong science and mathematics focus. The hands-on aspect is really important, because then students are encouraged to work as a team to accomplish a physical challenge using their data and materials' info. That's when the going gets tough and the children grow into their own engineering roles. The most wonderful part is that the children can keep working at their engineered devices all summer long.

Save the dates for this summer's adventure taking place at the Barnard School in South Hampton, July 13-17, 2015.
A couple of SAU21 Teachers are welcome to join us to learn about engineering design and challenges!
If you are involved in one of the engineering fields and want to contribute your expertise to our KEEPERS program (a guest engineer is needed for each day of the program) please contact Barbara Hopkins at the SAU21 office 603-926-8992x104 or bhopkins@sau21.org

To Register: https://www.surveymonkey.com/s/SAU21_KEEPERS

***KEEPERS has been a long-standing program of the UNH Leitzel Center for Mathematics, Science and Engineering Education where additional weeks are available (http://leitzelcenter.unh.edu/pdf/carmelina_cestrone.pdf).**

Winnacunnet High School held their 3rd annual "VEX Seacoast Winter Classic" Robotics competition on Saturday, January 17, 2015. This was a free event and many families stopped in to view the competitions.

For more information on the Winnacunnet Engineering program, please contact Jim Muthig WHS

Designed By Trevor Duquette

Tech Engineering

In the winter of 2012-13, a Google survey was administered to Winnacunnet students, staff, and the community. The results of this survey indicated that students and staff do not have reliable and consistent access to technology throughout the school day. This is in contrast to the majority of students and staff who report having adequate technology at home. The following summarizes some of the specific needs documented by the surveys.

⇒ There is inadequate access to technology (computers, tablets, interactive whiteboards, etc.)
⇒ Computers often malfunction, are slow or simply do not work as they are outdated.
⇒ Wireless internet is not available throughout the building, and where available it is often unreliable.
⇒ Teachers express frustration at the inability to use innovative educational material online.
⇒ Teachers report that it is often difficult to receive training on integrating technology into their curriculum.
⇒ New generation hardware (e.g. iPads and Chromebooks) is scarce and difficult for teachers to schedule for use in their classrooms.
⇒ Present bandwidth makes streaming of educational material inconsistent or non-existent.
⇒ Email network has been unreliable at times, thus hampering communication with parents and within the school.
⇒ Student and teacher work has been lost due to failed storage systems and servers.

This fall (2014-15) WHS completed an overhaul of its wireless capacity and began a one-to-one trial with Chromebooks issued to 40 individual sophomores in an integrated English & Social Studies course. The positive outcomes of this trial have advanced the 2015-2016 plan to purchase Chromebooks for every member of the freshman class. Like a textbook, these devices will be signed out and collected by WHS, but remain in the possession of students during the school year. For every subsequent year, the school will continue to purchase a technology device for every incoming freshman. According to this schedule, WHS will be a 1:1 (1 device deployed to every student) school by 2018-19. A user fee will be collected to offset costs and any necessary repairs. In the past half year, only 2 screens needed repair (about $40 repaired by WHS staff). It is our belief that 1:1 will make Winnacunnet more equitable in providing access to the best resources and tools available to every student, regardless of their economic background, physical location or area of curricular interest.

Chromebook Rationale for 1:1

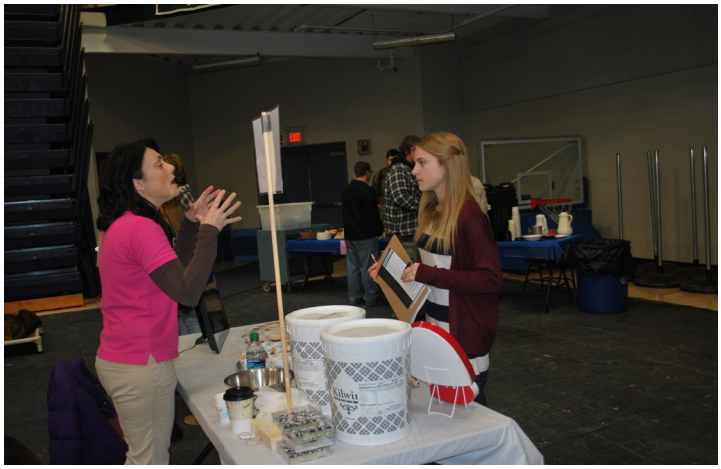
A Chromebook is a laptop that runs a basic operating system that has limited file storage, but utilizes a web browser and cloud based applications to leverage its computing power. It is a low cost device (approximately 1/4 the cost of traditional laptop) and has no moving parts. This design has proven to be particularly durable in the school environment, and it is anticipated to reduce the cost passed on to families for damage. Chromebooks are also simple to manage on a large scale, thus allowing us to increase the number of devices without dramatically increasing the number of support staff. The Chromebook creates an opportunity for WHS to adopt a consistent and predictable technology budget.

For more information please use the QR code on the left or Parent Info.

Designed By Trevor Duquette

Career Day

The Junior class of 2016 held their annual Career Day on Thursday, January 23rd in the gymnasium where 68 companies were represented. Students had the opportunity to explore areas of expertise and make further decisions about their futures.



Career Day

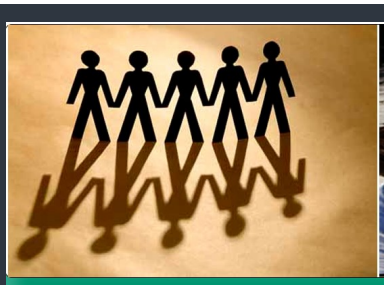

SEACOAST UNITED
WARRIOR
SOCCER
Career Fair

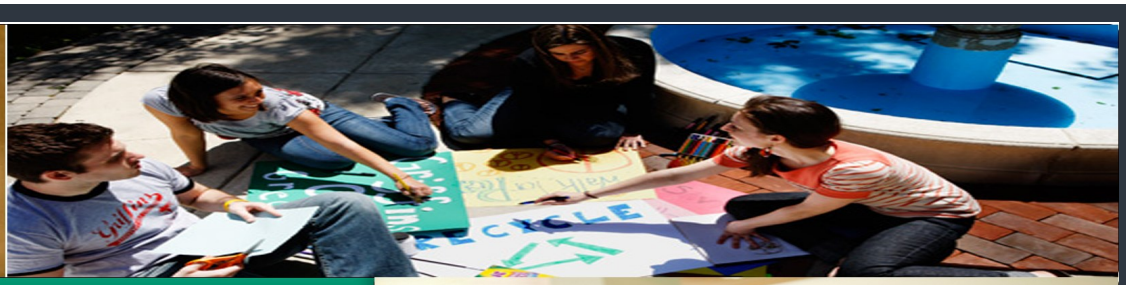

KELLER WILLIAMS
SAM AUFFANT
978-764-4096


SIG SAU

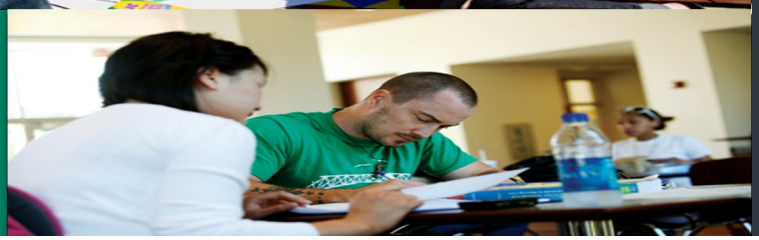

U.S. CITIZENSHIP REQUIR
APPRENTI


CHRISTO LAW OFFICE
Attorney





Student Services SPED



We asked our Student Services teams to describe their favorite apps for helping our students and this is what they shared:

Barnard School:

The Social Express™ targets core deficit areas that stand in the way of school, social, and life success for children and young adults with social learning challenges. The Social Express app is full of beautifully detailed animations which take users through countless different social situations. All the while, the app shows them the proper responses and allows kids to test their social knowledge by helping the characters make good choices!

Let's Name Things is a free educational app from Super Duper Publications, a company that provides many learning apps for kids with special needs.
Meant to be used by an educator or caregiver, Let's Name Things features 52 picture cards with prompts such as "let's name things that have whiskers" or "let's name things that are big." You can select all the cards or as many as you would like to review with the players.

Winnacunnet High School:

Read 2 Go is linked to Bookshare, so once a student is enrolled they can download available books, textbooks, magazines, newspapers in a matter of minutes. Read2Go is the most accessible e-book reader app for readers with print disabilities. Directly from within the Read2Go app, Bookshare members can find, download, and read books all on a single Apple device. No need to download books to computers, transfer files, or decompress files! Just download and READ!

North Hampton School:

ArtikPix full- I like this one because of it's ability to be customized. You can choose which sound you want to work on, if you want to work on it in a word or sentence, and you can play a game or just do flash cards. You can also record their speech so they can listen to their productions. It provides immediate feedback as you choose a happy or sad face as they go along, and you can also take notes on a notepad and save them.

Raz-Kids- This app lets students read books at their reading level. You can choose a range of levels around the one for the student using the app (let's say they are reading at a level
G- you can choose to let the student have access to levels D-I). At the higher levels students have comprehension questions they can answer after they have completed the book. it also provides incentives such as little rewards for completion of a certain number of books.

Syntax City- This is a great app for practicing verb tenses, plurals, pronouns, and verb forms. You can choose the difficulty level and form to practice for each student, and this app provides a percent correct when the student finishes for each session.
Sentences are shown with the target word missing, and students have to choose which form completes the sentence. The app reads the sentences, and at the higher levels the students can record the sentences when done. What I like best is after we have worked together on this, I can then go to the report that has been generated and look at the data (percent correct) so I can choose to increase the difficulty or provide more practice.

MUSIC

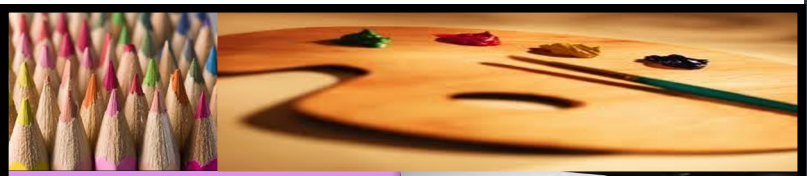
The Music Vertical Team met with the Visual Arts Team in November and discussed how to foster creativity within our students and the ways of assessing the effectiveness of our curriculum. Creativity is an essential skill for the 21st century and is native to both the Visual and Performing Arts. In today's economy, our young adults are literally inventing their careers and those with a creative view of the world are better able to solve problems, innovate and see new strategies for the improvement of our world. There currently are many researchers also studying how creativity might be better enhanced in the educational process. That said, there are no easy methods that can speak to the myriad of ways in which our students create. Our discussions included use of national standards and how we currently advance our students' learning.

With the new emphasis of our Appraisal system to include Student Learning Objectives (SLOs), we wrestled with some of the common attributes of our programs, mostly united through the standards. The music team was able to agree upon an SAU-wide SLO around rhythmic proficiency. In the future, we hope to meet as a team more often to monitor our SLO data and share and discuss new ways to teach and involve students in music. The Music Departments and students SAU wide wrapped up a series of very successful holiday concerts, caroling community service trips and tree lightings that encourage student's sense of community and presentation skills.

A highlight of the winter will be the **SAU 21& SAU 90 Band and Chorus festivals on March 17th for the Bands and March 11th for the Choruses.** These festivals combine students from the SAU 21 and SAU 90 to perform pieces that are prepared before hand and then performed as a joint chorus and band with students from all the schools. Please mark those dates on your calendars!

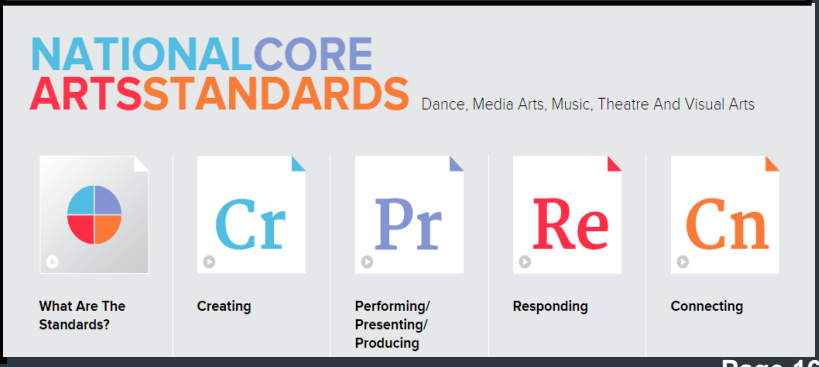
ELEMENTS OF ART

LINE	A line is an identifiable path created by a point moving in space. It is one-dimensional and can vary in width, direction, and length.	
SHAPE	Shape and form define objects in space. Shapes have two dimensions, height and width,and are usually defined by lines.	
VALUE	Value describes the brightness or darkness of color. a gradient is a series of values from darkest to lightest.	
FORM	Shape and form define objects in space. Forms exist in three dimensions, with height, width, and depth.	
SPACE	Space in a work of art refers to a feeling of depth or three dimensions. It can also refer to the artist's use of the area within the picture.	
TEXTURE	The surface quality of an object that we sense through touch: hard, soft, rough, smooth, hairy, leathery, sharp, etc.	
COLOR	Reflected.light, Organized on a color wheel with 3 primary colors, 3 secondary colors and 6 intermediate colors.	



Art

The Visual Arts team also continued their discussion about Student Learning Objectives (SLOs) and looking at the National Standards to find commonality within the wide range of grades taught throughout the SAU. The team agreed upon an SAU-wide SLO around the Elements and Principles of Art. We are looking forward to gathering together again to discuss our progress and ideas for assessing our students' growth on April 3, 2015.



The following list was compiled by Elaine Smith, a dedicated Seabrook Middle School teacher. These are notes are compiled from questions (with pertinent vocabulary underlined) in each of the Grade Level SBAC ELA Practice Tests. Parents might also find this vocabulary helpful in dialogue with children. Thank you Elaine!

GRADE 3

- Need to move sentences
- Inference
- Events and experiences
- Main idea
- Arrange events in order
- Dialog—why important?
- Best conclusion
- Best supporting details
- Author's point of view
- Paragraph headings
- Sources

GRADE 4

- What conclusions can be drawn
- Author's point of view
- Add supporting details to make clearer
- Support the author's opinion
- Details that support the conclusion
- Add to the reader's understanding/thoughts
- Punctuation and grammar
- State the main idea
- Introductions
- Author's purpose
- Effect that the author creates

GRADE 5

- Closing statement
- Summarize the central idea
- Use more exact words
- Evidence that best supports the answer
- Point of view—change
- Best represents ideas
- Author's point of view
- Draw conclusions
- Remove sentences that do not support main idea
- Summary
- Punctuation
- Conclusions supported by presentation
- Best website sources
- Supporting an opinion

GRADE 6

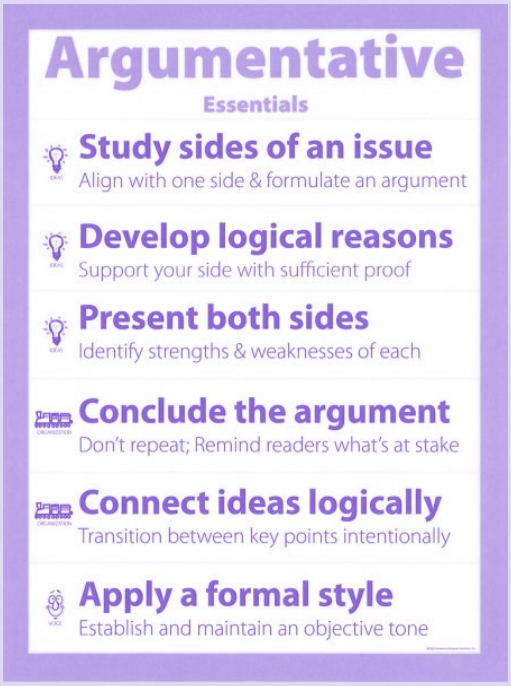
- Inference
- Narrator's feelings
- Restate
- Best illustrates the inference
- Credible sources
- Supporting an opinion
- Clear and specific language
- Paraphrase
- More exact words
- Introduction to establish a claim
- Author's intent
- Conclusion is best supported by evidence from text
- Transitions
- Transition sentences
- Transition paragraphs
- Summarizes central idea
- Relationship between evidence from text
- Reference to
- Add to confusion
- Dictionary definition
- Follow logically—events or experiences
- Suggest about
- Relationship between
- Purpose most likely

GRADE 7

- Cite evidence
- Explain how sources support information provided
- Provide pieces of evidence
- Sentences that support the conclusion
- Summarize the central idea
- Use key evidence to support your summary
- Author's intent
- Information best supported by the text
- Add to the development of the characters in the text
- Add descriptive details
- Support the inference
- Paraphrase and summarize
- Credible and relevant sources
- How the characters interact
- Maintain a formal style
- Misplaced modifiers—gerunds, participles
- The word "task"
- Inference about the narrator's feelings
- Most likely the author's intent
- Sentences from the text that best illustrate the inference
- Conclusion best supported by evidence
- Quotations
- Identify the source that supports the claim
- Transition sentence between two paragraphs

GRADE 8

- Best summarizes the central idea
- Excerpt from a dictionary definition
- Effect of author's use of words on reader's understanding
- Effect that the author creates
- Choose the sentence that best reveals
- Sentence that best represents the theme
- What conclusions can be drawn
- Explain how the use of flashback affects the events in the text
- Effect of description on the relationship of
- Appropriate for audience
- Best concluding sentence
- Editorial
- Central idea
- Which claim is not fully supported
- Errors in punctuation
- Errors in grammar usage
- Best way to revise
- Paraphrase
- Restate
- Introductions that establish clear claims
- Supporting evidence
- Which information conflicts with certain sources.



GRADE 9

- Statement that best summarizes author's central ideas
- Detail from the text that best supports answer
- Complete the second paragraph provided using information from notes in the first paragraph
- Sentences that best conclude paragraphs
- Evaluate sources from provided websites
- Sources are credible
- Sources are relevant

GRADE 10

- What can you conclude about the author's predictions
- Summarize the author's central idea
- Detail from the text that best supports your answer
- Underline the topic sentence
- Complete the second paragraph
- Sentence that best concludes the second paragraph
- Viewpoint that is supported by both of the quotes and the presentation
- Source is credible
- Source is relevant to the topic

GRADE 11

- Text that best supports the conclusion
- Statement that best summarizes the central idea of text
- What conclusion can be drawn
- Sentences from text that best support
- How does the paragraph affect the structure of the text as a whole
- Detail that best supports the inference
- Read the excerpt
- Sentence that best reveals the central idea of the text
- Best describes what is revealed about the narrator
- Adds to the characterization of the narrator
- Statement that best describes what metaphor means
- Read the draft from the memoir
- Move the sentence in the narrative that would best maintain coherence
- Which source would most likely be relevant
- Justify your answer
- Support your answer with information from the sources
- Paraphrase information from Source # 1 that refutes information from Source # 2 without plagiarizing
- Show claims that each source supports

GRADE 12

- What can a reader conclude about the author's prediction
- Best summarizes author's central idea
- Detail from text that best summarizes your answer
- Using the underlined topic sentence, complete the second paragraph
- Choose sentence that best concludes the paragraph
- Listen to the presentation, read quotes, and answer questions
- Which of the following viewpoints is supported by both of the quotes and the audio presentation?
- Evaluation of sources and determine if each source is relevant to the topic of the paragraph and/or is a credible source

Six Shifts in ELA/Literacy

Shift 1	PK-5, Balancing Informational & Literary Texts	Students read a true balance of informational and literary texts. Elementary school classrooms are, therefore, places where students access the world – science, social studies, the arts and literature – through text. At least 50% of what students read is informational.
Shift 2	6-12, Building Knowledge in the Disciplines	Content area teachers outside of the ELA classroom emphasize literacy experiences in their planning and instruction. Students learn through domain-specific texts in science and social studies classrooms – rather than referring to the text, they are expected to learn from what they read.
Shift 3	Staircase of Complexity	In order to prepare students for the complexity of college and career ready texts, each grade level requires a "step" of growth on the "staircase". Students read the central, grade appropriate text around which instruction is centered. Teachers are patient, create more time and space in the curriculum for this close and careful reading, and provide appropriate and necessary scaffolding and supports so that it is possible for students reading below grade level.
Shift 4	Text-Based Answers	Students have rich and rigorous conversations which are dependent on a common text. Teachers insist that classroom experiences stay deeply connected to the text on the page and that students develop habits for making evidentiary arguments both in conversation, as well as in writing to assess comprehension of a text.
Shift 5	Writing from Sources	Writing needs to emphasize use of evidence to inform or make an argument rather than the personal narrative and other forms of decontextualized prompts. While the narrative still has an important role, students develop skills through written arguments that respond to the ideas, events, facts, and arguments presented in the texts they read.
Shift 6	Academic Vocabulary	Students constantly build the vocabulary they need to access grade level complex texts. By focusing strategically on comprehension of pivotal and commonly found words (such as "discourse," "generation," "theory," and "principled") and less on esoteric literary terms (such as "onomatopoeia" or "homonym"), teachers constantly build students' ability to access more complex texts across the content areas.