

Wayland Public Schools

February 1, 2016 School Committee Meeting

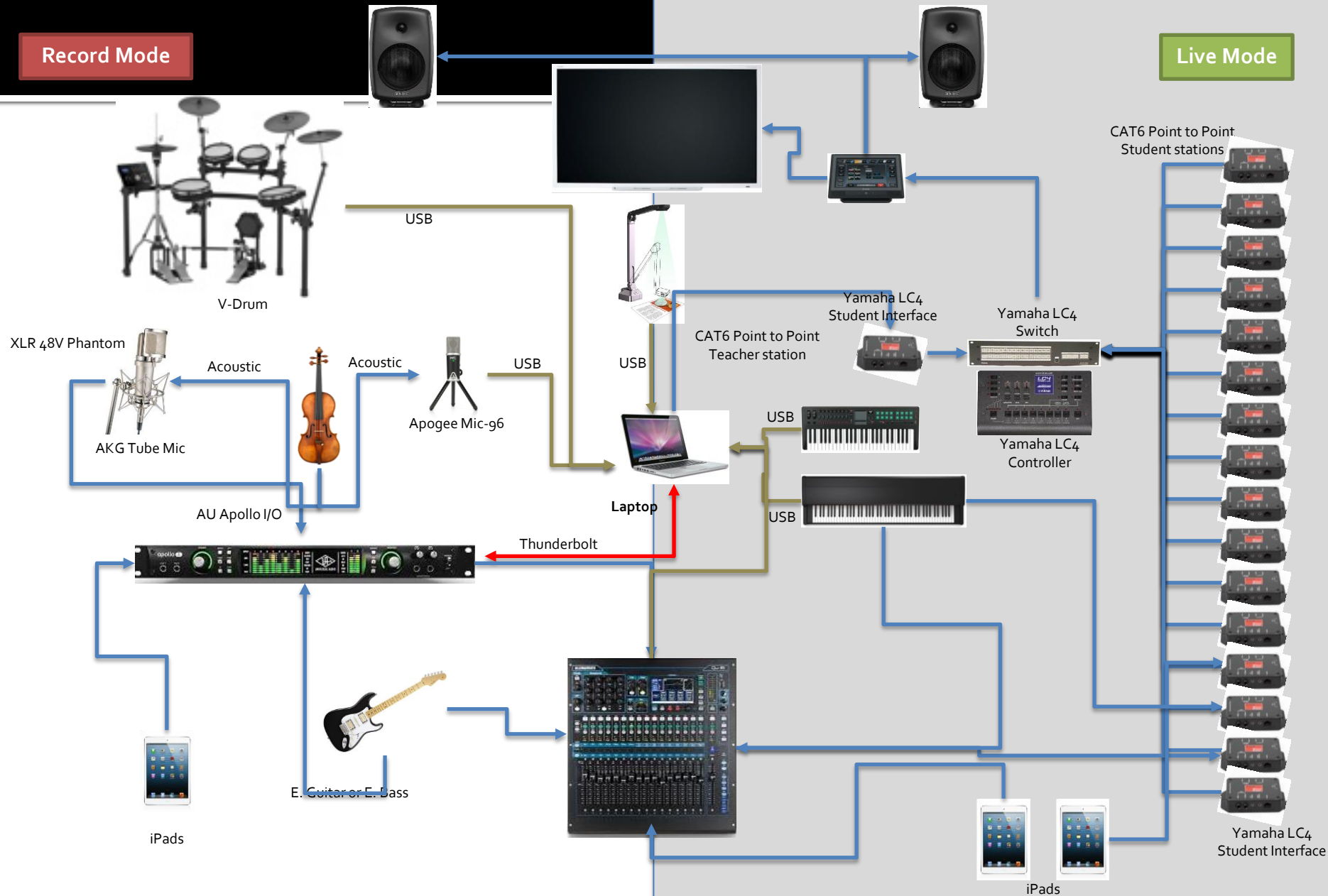
Curriculum Spotlight #9

Music Production Studio

Design Flow Chart

Record Mode

Live Mode



Music Production Studio Teaching Station



Music Production Studio Student Workstations (49 Keys)



Korg Taktile Keyboards are under desk

Music Production Studio

Student Workstations (88 Keys)



Music Production Studio

Roland Electronic Drum Station



Music Production Studio

Bird's Eye View of the Lab



Music Production Studio

Recording and Overdub Sessions



Overdub = Adding new tracks to an existing recorded session.



Music Production Studio

Music Technology Overview

- The Music Production Studio is an industry-standard, state of the art facility. It was designed and built by Chee-Ping Ho in the summer of 2015.
- It is equipped with 16 stations (4 full keyboards, 12 half keyboards, 1 Teaching Station with both full and half size keyboards).
- All full keyboards are weighted and used primarily for piano proficiency classes.
- Macintosh computers have a professional piano sound library to create a more realistic experience for piano students.
- Every Mac computer has the latest notation and audio workspace software.
 1. Notation: Finale
 2. Digital audio workspace (AKA DAW): Logic X, Garage Band, ProTools
 3. Orchestral Mock up Sample Library: Vienna Symphony Library (VSL)
- The Music Production, Film Scoring and Composition program takes advantage of this software.
- Students have access to an electronic drum kit and recording equipment, which can be used with the supervision and assistance of the teacher.

Music Production Computer Lab

Music Technology Overview

- The studio is a great resource for all students, regardless of their musical background.
- All students can explore composition, whether they have studied music formally or not.
- Full keyboards and piano library make practicing convenient and give students realistic sounds as if the students were playing on a 9 foot grand piano.
- Students interested in Music Technology, Scoring for Film/TV, and Music Composition programs in the future can explore their interest with state of the art software and hardware.
- Audio Engineering, live sound, sound design, basic mixing techniques and music business are courses that could be taught in the future using this lab.

Music Production Computer Lab

Recording & Overdub Session



Say Something

Composers: Ian Axel, Chad King & Mike Campbell

Performers: Anthony S., Andrea V. & Chris L.

Music Production Computer Lab

Vocal Harmony Recording

(Also used overdub technique)



Parting Glass

Traditional Scottish song arranged by Gene B.

Performed by Ethan T., Gene B. & Anthony S.

Music Production Computer Lab

Sample Student Compositions



Jingle Ideas
Andrew B-S.



Teonova
Chris L.

Wayland Public Schools

February 22, 2016 School Committee Meeting

Curriculum Spotlight #10

Grade 7 Art Invention Project

Grade 7 Art Invention Project

- Context: The seventh grade is an important year developmentally for art students. They often decide whether they are artistic or not.
- This project highlights the fact that there is an art to engineering and design. In contrast to fine art, this approach applies and utilizes art in a different way. Art can solve problems; it's not just about what looks “good.”
- Students, who otherwise might not see themselves as artists, suddenly do when they see art in this new light.

Grade 7 Art Invention Project

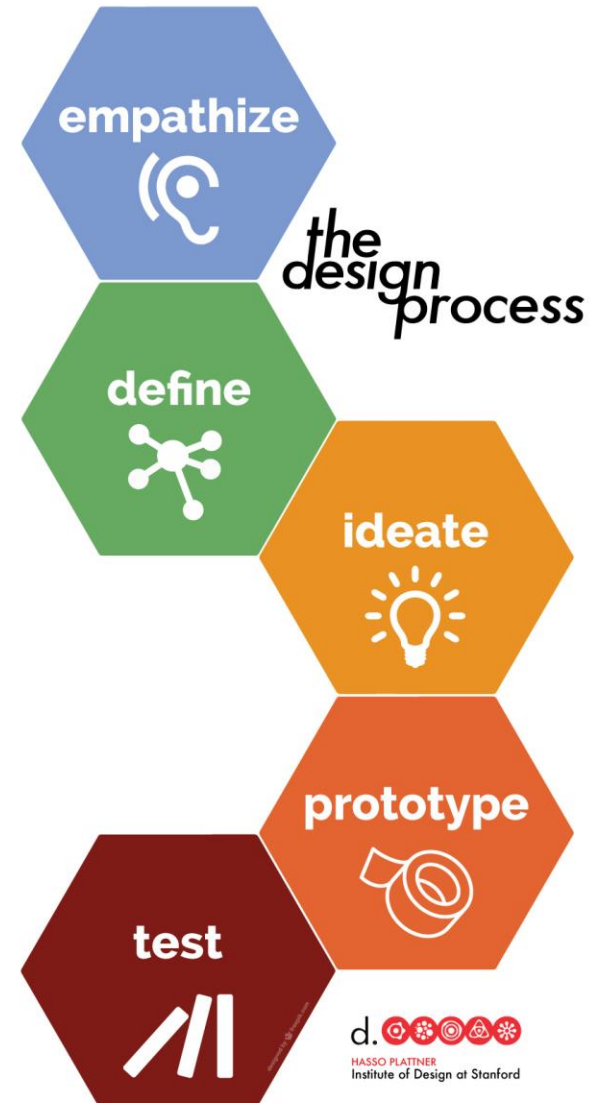
Be the Change Project

The Task: Students choose a problem that is important to them, and then are charged with finding a solution, using visual problem solving to do so. Working alone or in groups of 2 or 3, they...

- learn about the relationship of form to function.
- structure and execute a plan, approaching their problem from different angles.
- draw on their communication skills to convince others that they have chosen and designed a good solution.

Grade 7 Art Invention Project

The Design Process begins with empathy. Students must think of the end user.



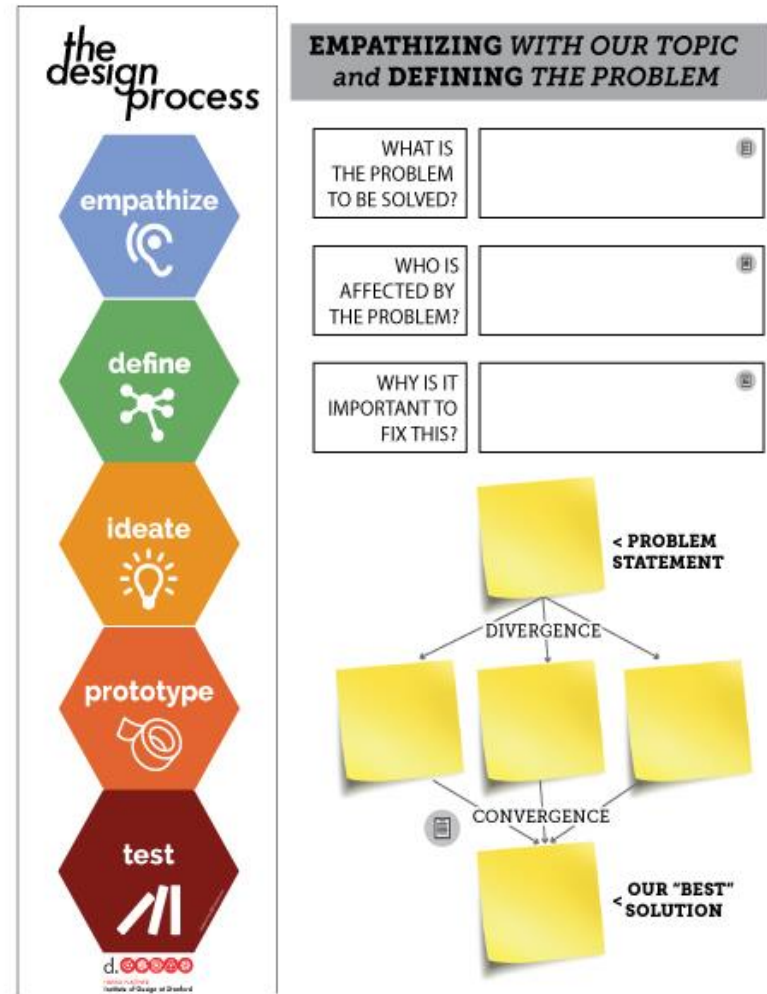
Grade 7 Art Invention Project

Students must define the problem.
They work together to identify a
Common problem that needs a
fresh solution:

What is the problem to be solved?

Who is affected by the problem?

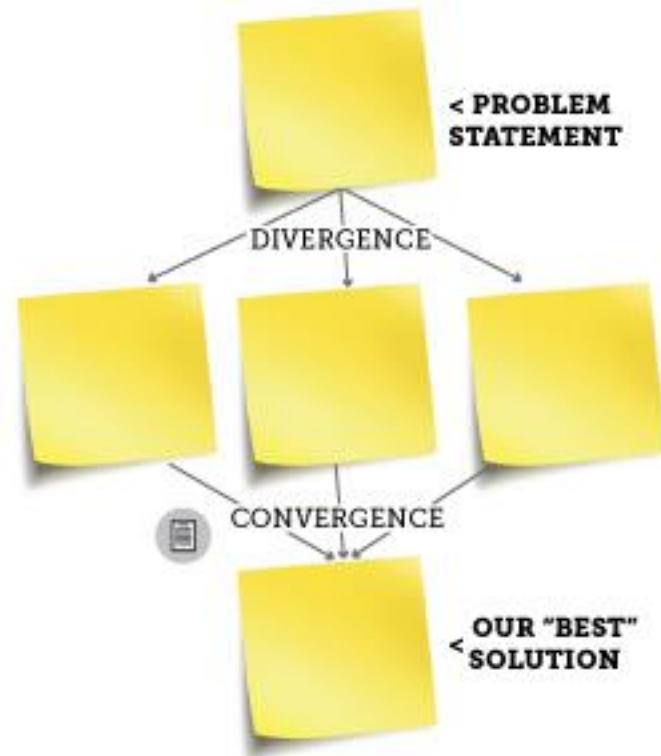
Why is it important to fix this?



Grade 7 Art Invention Project

Students brainstorm solutions to the problem, using divergent and then convergent thinking.


They chose a best solution, and design and test their prototype.



Grade 7 Art Invention Project

Creating a prototype:


BE THE CHANGE
PROPOSAL




What is your group's "PROBLEM STATEMENT?"

What did you write on your Final Post-It during the Brainstorming Exercise?

The objective of your project is to develop a **VISUAL SOLUTION** to your **PROBLEM STATEMENT**. In the boxes below, **SKETCH** and/or **DESCRIBE** how you **ENVISION** your final product. *Use details and be specific.*



Notes/Feedback from Peers and Mr. Curran:

 Materials List	Steps to Follow	Mini-Schedule
		Session 1:
		Session 2:
		Session 3:
		Session 4:

Proposed by: _____ Date: _____
Approved: _____ Date: _____

Grade 7 Art Invention Project

Group Presentation: Pitching Their Idea

- Students present their ideas to the class. For instance, they may choose to develop a PowerPoint presentation, a logo design, a commercial and/or a Kickstarter campaign.
- The other students in the class provide feedback. They ask questions and play the role of the “Sharks” on ABC’s *Shark Tank*. They use their Chromebooks to fill out a Shark Tank Google form.

Grade 7 Art Invention Project

Assessment:

Name the group's PROBLEM that they set out to solve: *

"The problem this group was trying to solve was _____."

Which TOOLS did the group utilize? *

This group used these TOOLS to pitch their product:

- ☐ Prototype or Model
- ☐ Blueprints or Illustrations
- ☐ Video or Commercial
- ☐ Lecture or Speech
- ☐ Slideshow
- ☐ Other:

Grade 7 Art Invention Project

Assessment (continued):

On a Scale of 1 to 5, how EFFECTIVE was their pitch? *

(1 = "Why would I spend money on this?" and 5= "This product sounds like a great idea! I can't wait to see it in stores!")

1 2 3 4 5

Why would someone pay \$\$ for this? ☐ ☐ ☐ ☐ ☐ Great Idea!

Name a Successful part of their Pitch. *

"One thing they did that was effective or successful was _____."

Name an area of OPPORTUNITY: *

"I wonder if the pitch would have been more effective if _____."

Grade 7 Art Invention Project

Problem Statements and Design Projects

It really hurts to hit your funny bone.

Design project: an arm guard



Artists:
Darcy F. & Kristen B.

Eating spaghetti can be messy and hard to eat.

Design project: twirling fork



SPAGHETTI WOA!



Artists:
Sophia M. & Katie O.

Grade 7 Art Invention Project

Problem Statements and Design Projects

I keep stepping on Legos and it hurts.

Design project: a sock padded with memory foam

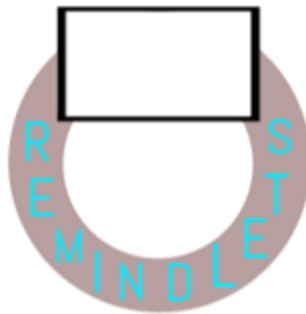
Artists:

Ben C. & Raseed P.



We forget stuff and are disorganized.

Design project: Remindlets (a white board bracelet)



Artists:

Laura C. & Zoe S.

Wayland Public Schools

March 7, 2016 School Committee Meeting

Curriculum Spotlight #11

Words Their Way

Words Their Way

Words Their Way

- ... is a **developmental** and **differentiated** spelling program.
- ... employs methods which are in striking contrast to the traditional approach in which students memorize and are tested on common spelling lists.
- ... does not teach spelling "rules."
- ... engages students in phonics, vocabulary and spelling hands-on activities that lead to a greater *understanding* of language.
- ... has students take full advantage of visual and auditory cues while they increasingly gain experience recognizing word patterns. Students' motivation and interest in words increase because they make sense of words by looking for patterns.

Words have sounds, sounds go with letters, and those letters go together to make words.

Words Their Way

Key Components

- Developmental Stages
- Diagnostic Assessments
- Word Sorts

Words Their Way

Developmental Stages

I. EMERGENT STAGE

- Scribbles letters and numbers
- Lacks concept of word
- Lacks letter–sound correspondence or represents most salient sound with single letters
- Pretends to read and write

II. LETTER NAME–ALPHABETIC STAGE

EARLY LETTER NAME–ALPHABETIC

- Represents beginning and ending sounds
- Uses letter names to invent spellings
- Has rudimentary or functional concept of word
- Reads word by word in beginning reading materials

Words Their Way

Developmental Stages

II. LETTER NAME–ALPHABETIC STAGE

MIDDLE TO LATE LETTER NAME–ALPHABETIC STAGE

- Correctly spells initial and final consonants and some blends and digraphs
- Uses letter names to spell vowel sounds
- Spells phonetically, representing all salient sounds in a one-to-one, linear fashion
- Omits most silent letters and preconsonantal nasals in spelling (bop or bup for bump)
- Fingerpoints accurately and can self-correct when off track
- Reads aloud slowly in a word-by-word manner

Words Their Way

Developmental Stages

WITHIN WORD PATTERN STAGE

- Spells most single-syllable short vowel words correctly
- Spells most beginning consonant digraphs and two-letter consonant blends
- Attempts to use silent long vowel markers
- Reads silently and with more fluency and expression
- Writes more fluently and in extended fashion
- Can revise and edit
- Developmental Word Knowledge

Words Their Way

Scope and Sequence Example

Johnson, Bear, Invernizzi

Within Word Pattern	Spellings	Sorts
Short and Long Vowel Sounds	short a, e, i, o and u	1-6
Contrasting Short & Long Vowel Sounds & Patterns & final K spellings	CVC and CVCe & -ck, -ke, or k	7-12
Common Long Vowel Patterns	a_e, ai, ee, ea, o_e, oa, u_e, ui	13-18
Less Common Long Vowel Patterns	a_e, ai, ay, o_e, oa, ow, ew, ue, i_e, igh	19-24
R-Influenced Vowel Patterns	ar, are, air, er, ear, eer, ir, ire, ier, or, ore, oar, ur, ure, ur_e	25-30
Diphthongs and Other Ambiguous Vowel Sounds	oi, oy, oo, aw, au, wa, al, ou	31-35
Beginning & Ending Complex Consonants & Consonant Clusters	kn, wr, gn, scr, str, spr, thr, shr, squ, _ce, _ve, _se, dge, ge, tch, ch	36-42
High-Frequency Words and Contractions	Contractions with not, is, have	43-44
Inflectional Endings for Plural and Past Tense	Sounds _ed, s, es,	45-46
Long a, Long e, and Long i Homophones	i.e. (pear, pair), (steal, steel), (groan, grown)	47-48

Words Their Way

Developmental Stages

IV. SYLLABLES AND AFFIXES (Grades 3-8)

- Spells most single-syllable words correctly
- Makes errors at syllable juncture and in unaccented syllables
- Reads with good fluency and expression
- Reads faster silently than orally
- Writes responses that are sophisticated and critical

V. DERIVATIONAL RELATIONS (Grades 5-12)

- Has mastered high-frequency words
- Makes errors on low-frequency multisyllabic words derived from Latin and Greek
- Reads with good fluency and expression
- Reads faster silently than orally
- Writes responses that are sophisticated and critical

NOTE: The emphasis is for students to deeply learn the patterns associated with each developmental stage – and not to rush through higher levels.

Words Their Way

Diagnostic Assessments

At the beginning of the year, students receive a spelling inventory in which they spell 25 words read to them by their teacher.

The teacher assesses the students' performance, identifying which features of the words in the inventory were missed in order to determine each student's developmental level.

Words Their Way

Elementary Spelling Inventory Feature Guide

Words Spelled Correctly: _____/25					Feature Points: _____/62					Total: _____/87					Spelling Stage: _____				
Spelling Stages	Emergent		Letter Name-Alphabetic					Within Word Pattern				Syllables and Affixes			Derivational Relations				
	Late		Early			Middle	Late	Early	Middle	Late		Early	Middle	Late	Early	Middle			
Features	Initial Consonants		Final Consonants		Short Vowels	Digraphs	Blends		Long Vowels	Other Vowels	Inflected Endings	Syllable Juncture		Unaccented Final Syllables	Harder Suffixes	Bases or Roots	Feature Points	Words Spelled Correctly	
1. bed	b		d		e												0		
2. ship			p		i	sh											0		
3. when					e	wh											0		
4. lump	l				u		mp										0		
5. float			t				fl		oa								0		
6. train			n				tr		ai								0		
7. place							pl		a-e								0		
8. drive			v				dr		i-e								0		
9. bright							br		igh								0		
10. shopping					o	sh					pping						0		
11. spoil							sp		oi								0		
12. serving									er		ving						0		
13. chewed						ch			ew		ed						0		
14. carries									ar		ies	rr					0		
15. marched						ch			ar		ed						0		
16. shower						sh			ow					er			0		
17. bottle												tt		le			0		
18. favor												v		or			0		
19. ripen												p		en			0		
20. cellar												ll		ar			0		
21. pleasure															ure	pleas	0		
22. fortunate									or						ate	fortun	0		

Words Their Way

Word Sorts

Students are assigned to differentiated spelling groups based on assessment results. The groups focus on spelling and sound features that students need to learn. They work with level-appropriate word sorts in order to improve their understanding of how words work.

Word sorts are sets of words that students are asked to categorize. Students are given words cut up in pieces of paper. They sort these words in sound, spelling or meaning patterns.

With increased exposure, students will be able to readily recall a pattern. Once they become familiar with a pattern, they will be able to spell any word with the same pattern.

Words Their Way

Word Sorts

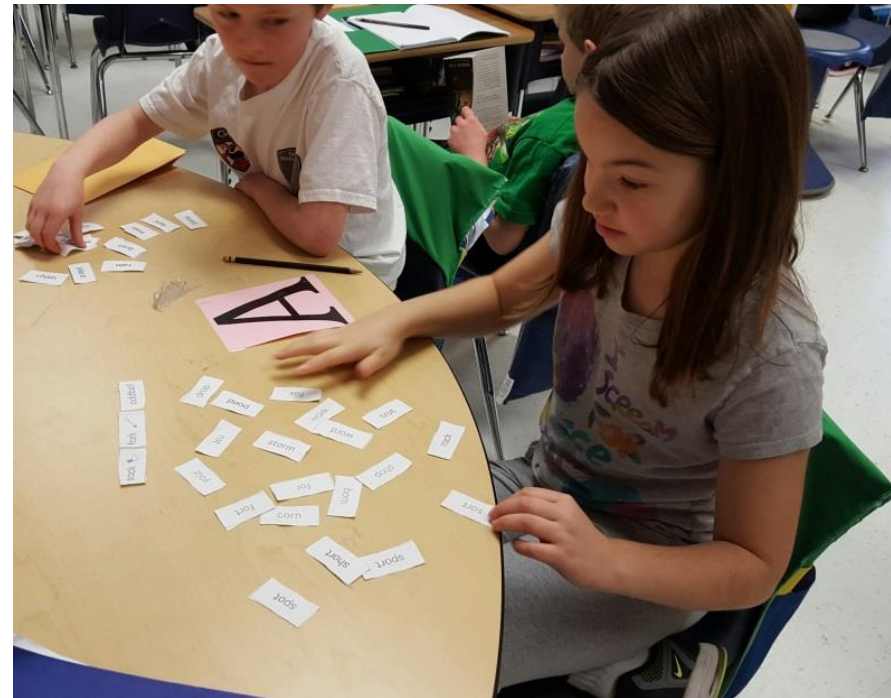
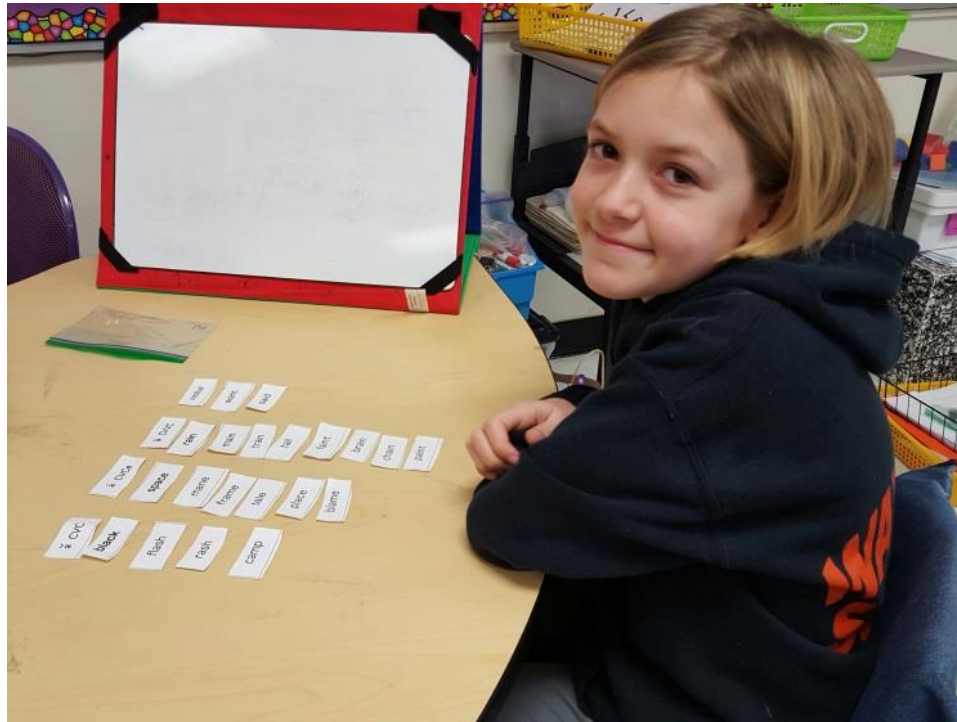
SORT 13 Short -a and Long -a (CVCe and CVVC)



ă CVC	ā CVCe	ā CVVC
<i>oddball</i>	space	rain
black	mane	tale
brain	paint	place
rash	blame	train
main	faint	want
chain	camp	tail
said	frame	flash

Words Their Way

Word Sorts



Words Their Way

Implementation in the Wayland Schools

- Teachers saw a need to strengthen our spelling program while building on the foundation provided by our reading program. This was most strongly felt in 2nd and 3rd grade.
- In the past few years, some teachers have piloted this program, for instance in Grades 2 and 4 at Claypit Hill and Grade 5 at Happy Hollow. Last year, the program was piloted in Grade 2 at Happy Hollow.
- This year, the program is used in Grades 2 – 5 at all three elementary schools.
- The Words Their Way activities occur during regular classroom instruction, as well as during the RTI and reading intervention blocks. A teacher might introduce a word sort at the beginning of the week, and follow this up with independent activities and/or homework throughout the remainder of the week.

Words Their Way

To provide a better sense of what Words Their Way is all about, here is a video which describes the developmental stages that underlie the program.

[Link to Video](#)

Wayland Public Schools

March 21, 2016 School Committee Meeting

Curriculum Spotlight #12

Kindergarten Birdfeeder STEAM Project

Kindergarten Birdfeeder Project

The Kindergarten Birdfeeder Project was designed by Meg Haydon, Susan Rahaim, Kay Seligson, and Jennifer Root – the kindergarten teachers at the Claypit Hill Elementary School.

Teachers are designing and introducing STEAM projects – three per class – in all grade levels throughout the elementary schools. This project illustrates one such unit at the kindergarten level.

The following PowerPoint describes the Claypit Hill project. The presentation was created entirely by Ms. Root.

Wayland Public Schools

- Kindergarten STEAM Lesson
- February 2016

OVERVIEW:

Teachers were asked to design and implement a STEAM lesson where the children would work in small groups to build a bird feeder.

State Standards

- Common Core State Standards -- CCSS.ELA-LITERACY.W.K.7
 - Participate in shared research and writing projects.
- Massachusetts Frameworks in Science -- Life Science, Pre-K-2:
 - 1. Animals and plants are living things that grow, reproduce, & need food, air, & water.
- Common Core State Standards -- CCSS.MATH.CONTENT.K.MD.A.1
 - Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

Common Core Mathematical Practices

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.



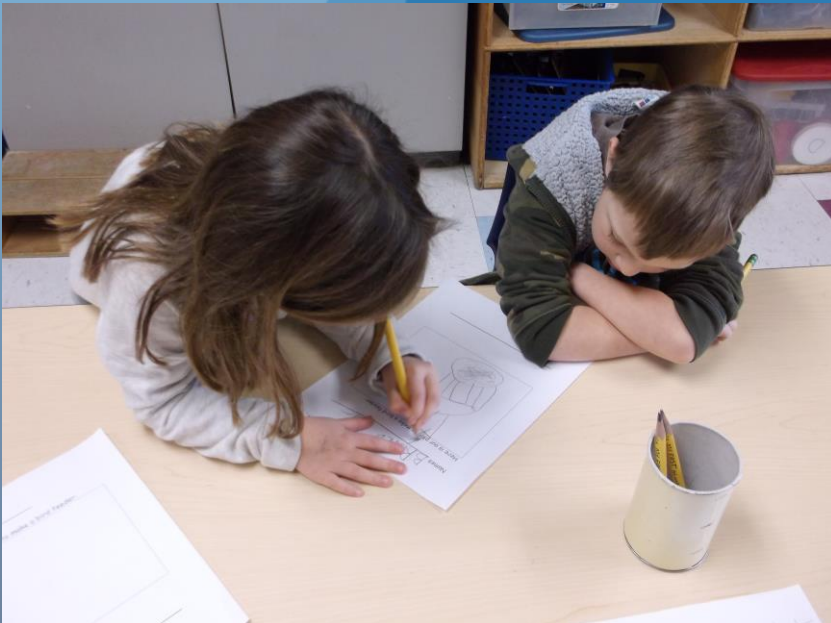
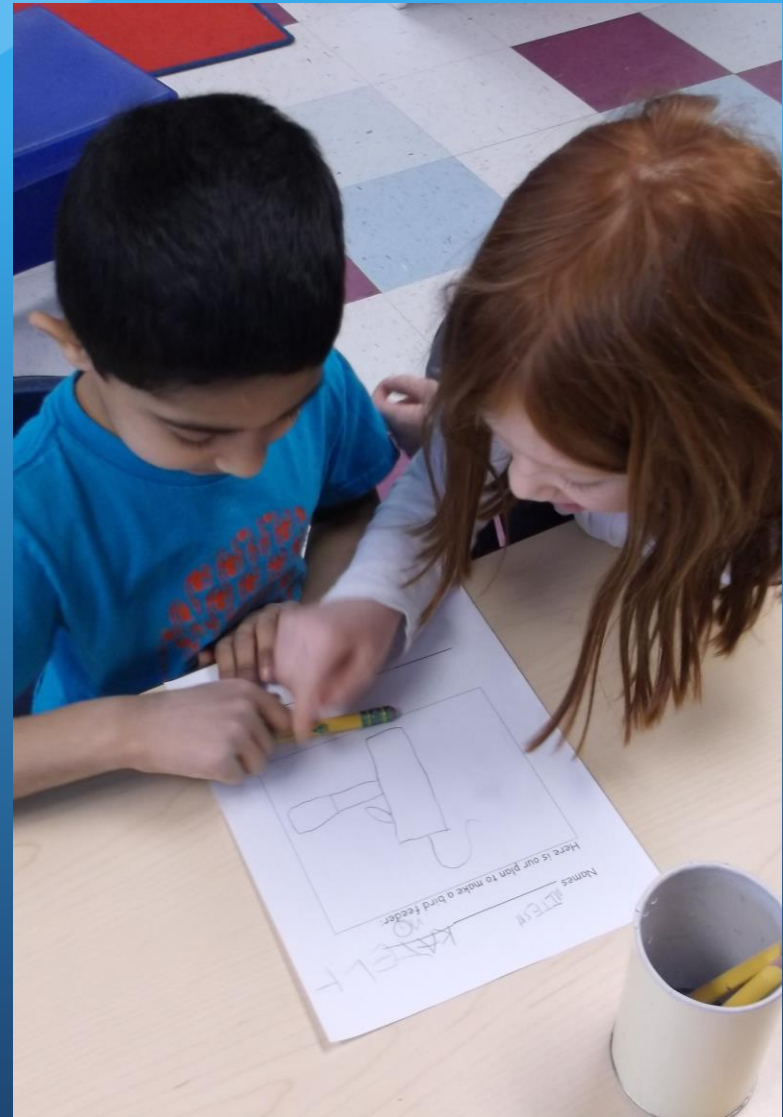
Turn and Talk

Teachers began by reading books and showing images of different bird feeders. We talked about why it was important to feed birds in winter. We talked about what things might be important in a bird feeder (a roof, weather proof, sturdy enough to hold a bird).

Once children were shown the materials, they spent some time talking to their partner about how they thought it could be built and what was important to each of them.

Design

Children went to the tables and worked with their partners to make a plan, draw it and label it.





Build

The next day, children were reminded of the project and we reviewed how to work with a partner and make sure everyone has a voice for the project.

Then they got to work!

All teachers felt that providing the children with an opportunity to work cooperatively was valuable.



The children were very engaged
in this hands on activity.

Teachers lent support and sharp
tool cutting when needed.



We hung the feeders outside our window. We were very proud of our work!

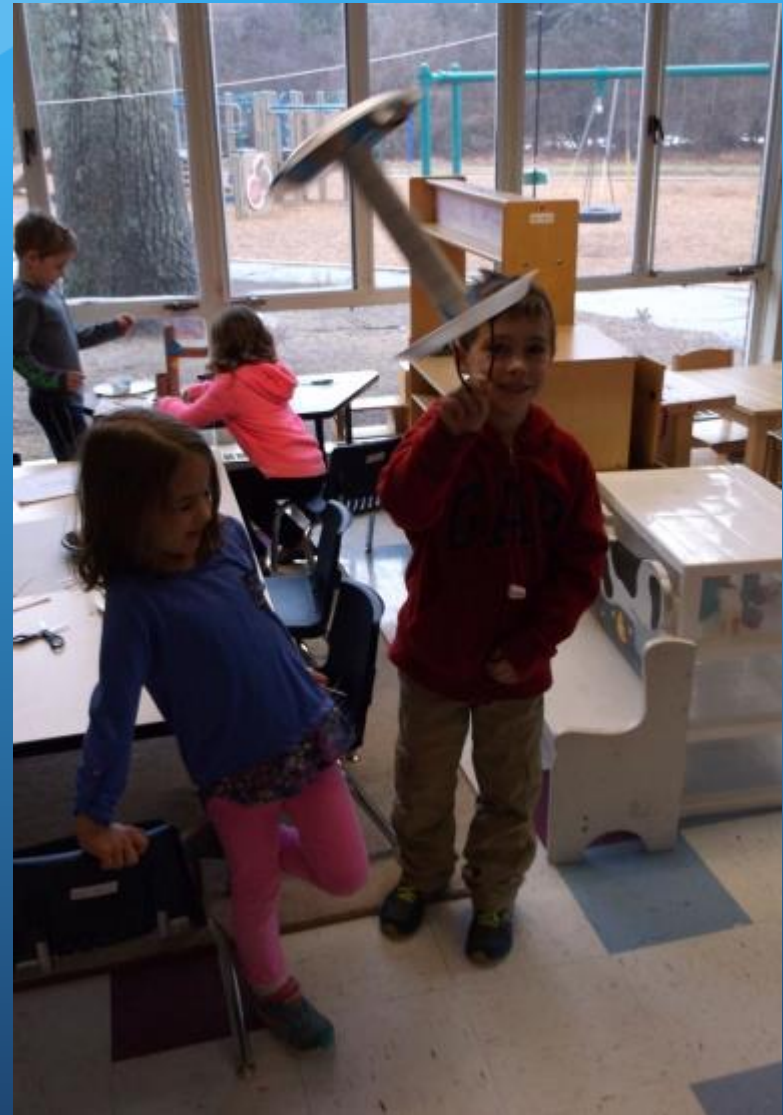


Here one child demonstrates how they made their feeder “wind-proof”.

The first day was VERY windy. The seed blew right out of several feeders.

Overnight 1 feeder blew completely away. Some children spotted it in the woods at recess!

Teachers were worried that the birds would not find the feeders, or even use them.



We added more seed to the feeders. And suddenly the Black Capped Chickadees noticed!

We learned that the Black Capped Chickadee is the state bird of Massachusetts.

At first, they hung around on the ground where the seed had spilled.

But then.....



Some started to hang out on the line for a closer look. The children were thrilled to watch this unfold right from their classroom!

And finally.....





Final Thoughts

- Project based hands-on learning is essential in the early childhood classroom.
- Many challenges arose during these activities. Some children could not be flexible in their thinking with their partners. They had an idea that would not be changed. On one team, one child made the top, the other child made the bottom, and they had no strategy to put their pieces together.
- One little boy who is usually quiet and rarely raises his hand to contribute to discussions, had his hand eagerly raised throughout the project. He has background knowledge of bird feeders because he has them at home. This beautifully illustrated what we already know-children are excited about learning when it is meaningful to them.
- Overall we really enjoyed this project, and are interested in ways to grow and expand the lessons.