

# Preparing for Tomorrow's World with Today's Curriculum

SYOSSET CENTRAL SCHOOL DISTRICT

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# Mission → Instruction

*"the future we imagine"*

## BOE Mission:

The mission of Syosset Central School District is to prepare students to **thrive** in both the future we imagine and one which may evolve in ways yet to be envisioned.

## Instructional WHY:

We have an obligation to prepare our students to be responsive to a **continually changing world** and take agency of themselves, their communities, and society as a whole.

# THE 4<sup>TH</sup> INDUSTRIAL REVOLUTION

## First



Machines  
Replace  
Manual Labor

## Second



Electricity  
Accelerates  
Mechanization

## Third



Technology  
Replaces  
Skilled Labor

## Fourth



Technology  
Replaces  
Knowledge  
Labor

The World Economic Forum Annual Meeting 2016 in Davos-Klosters, Switzerland was titled “Mastering the 4<sup>th</sup> Industrial Revolution” [http://www3.weforum.org/docs/AM16/AM16\\_MeetingOverview.pdf](http://www3.weforum.org/docs/AM16/AM16_MeetingOverview.pdf)

# ARE JOBS DISAPPEARING... OR **CHANGING?**

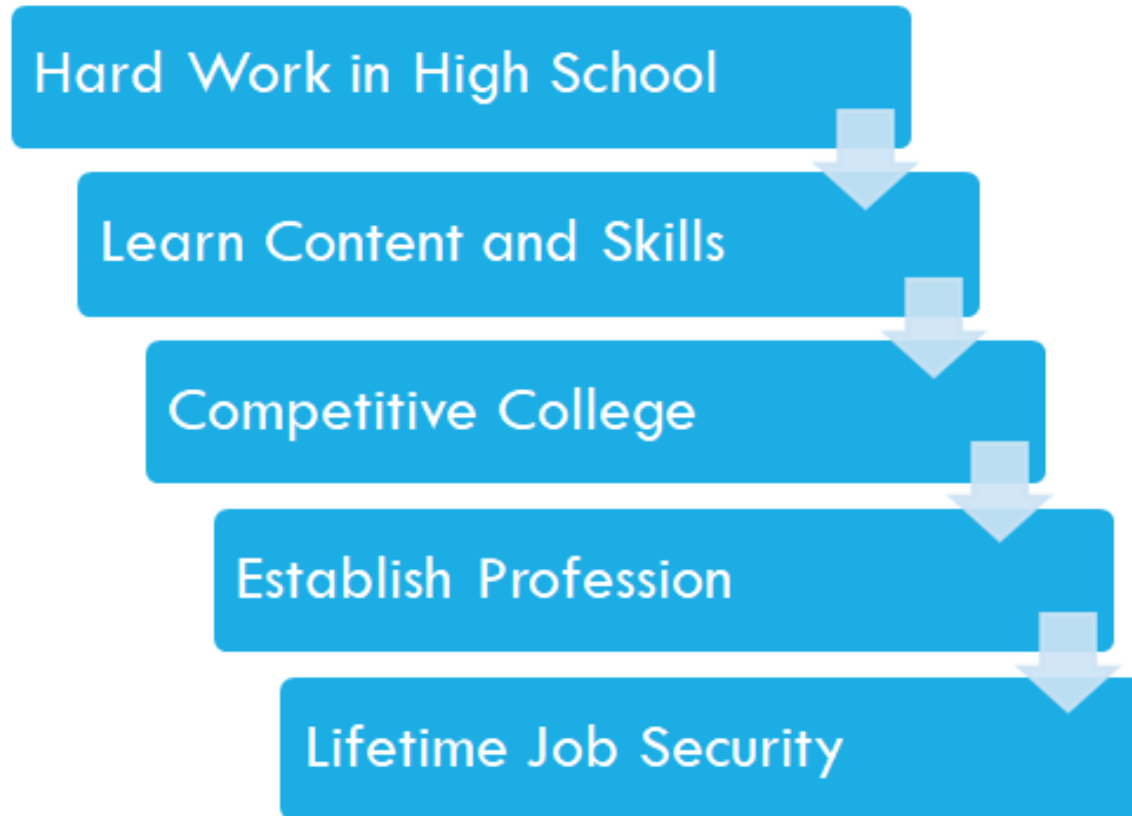
“...we are being a little bit myopic. It's so easy to identify ... the job functions that are going to be replaced ... with AI.

And it's so much harder to imagine the things that will be borne out of that innovation and the new industries ... and the new job functions that (will) emerge.”

~Aaron Levie, co-founder and CEO of enterprise cloud company Box.

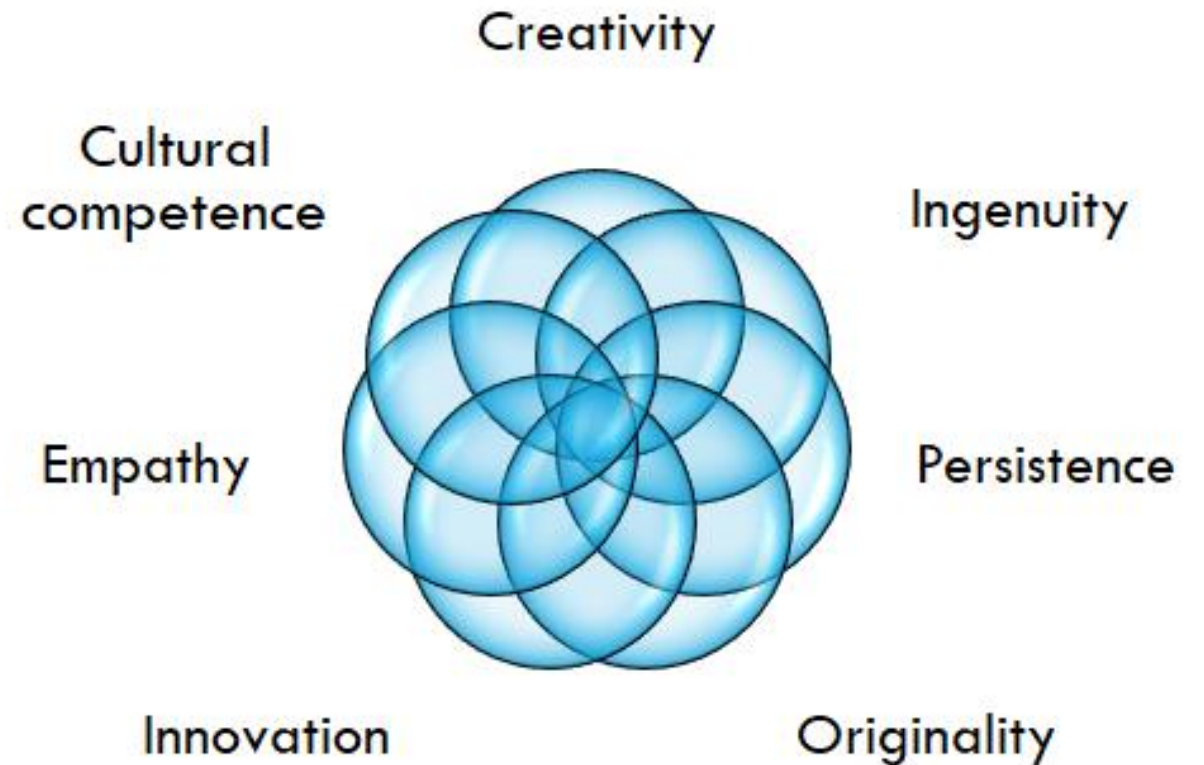
# "THRIVE" IN "THE FUTURE WE IMAGINE"

## Content-Based Paradigm



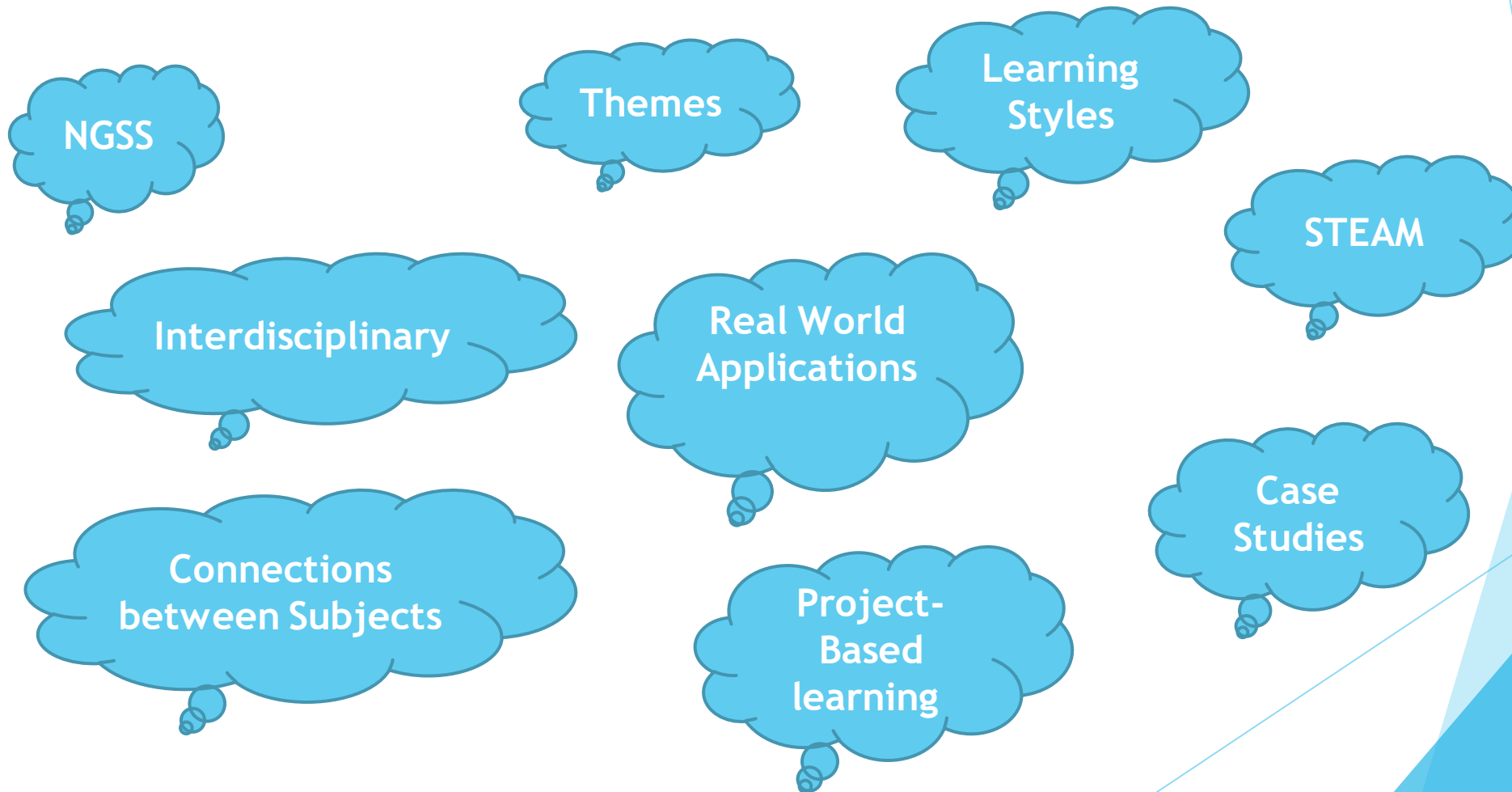
Fixed

## Skills-Based Paradigm



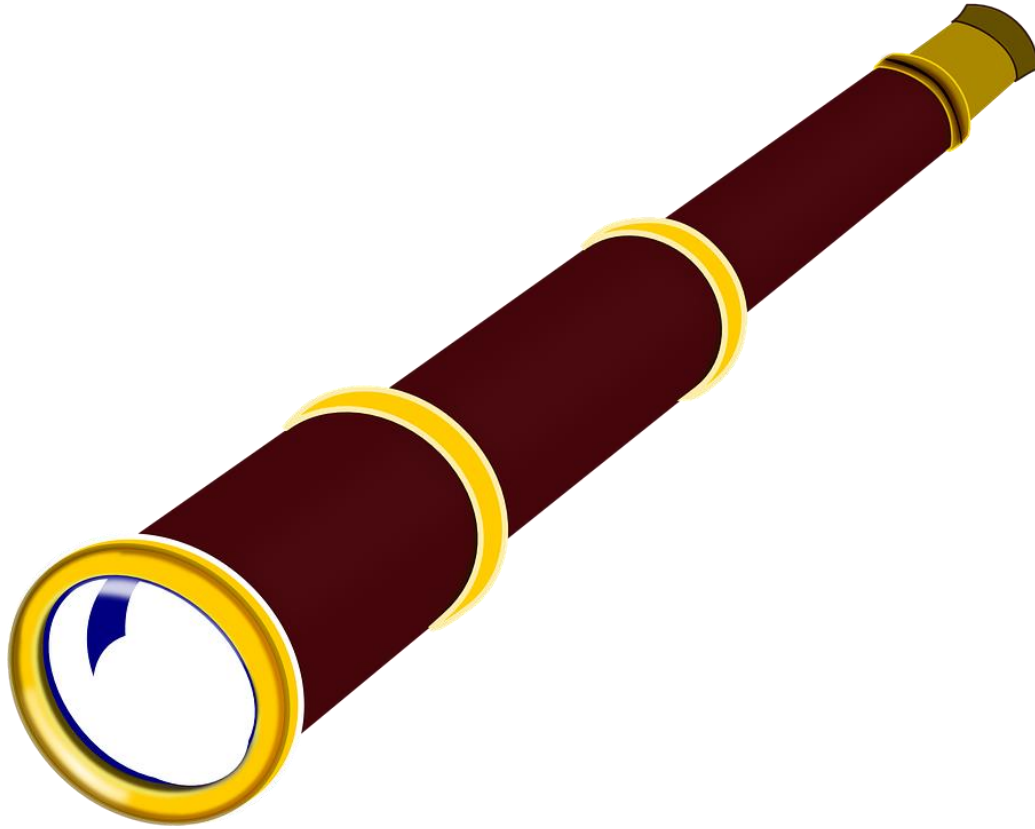
Fluid

# What do you think of when you hear "*crosscutting concepts*" ?



# Looking at the Student Experience

What do we do  
as teachers?



Developing Student's  
Innovative Capacity

**Preparing  
students for the  
*"future we  
imagine"***





# Engage in Thinking about Next Gen Standards

## ELA Practices (Next Generation)

- Demonstrate independence
- Build strong content knowledge
- Respond to the varying demands of audience, task, purpose, and discipline
- Comprehend as well as critique
- Value evidence
- Use technology and digital media strategically and capably
- Come to understand other perspectives and cultures

## Mathematical Practices (Next Generation)

- 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

## Social Studies Practices (Framework)

- Gather, interpret and use evidence
- Apply chronological reasoning and consider causation
- Compare and contextualize
- Apply geographic reasoning
- Analyze economics and economic systems
- Engage in, and value, civic participation

## Science and Engineering Practices (Next Generation)

- Ask questions and define problems
- Develop and use models
- Plan and carry out investigations
- Analyze and interpret data
- Use mathematics and computational thinking
- Construct explanations and design solutions
- Engage in argument from evidence
- Obtain, evaluate, and communicate information

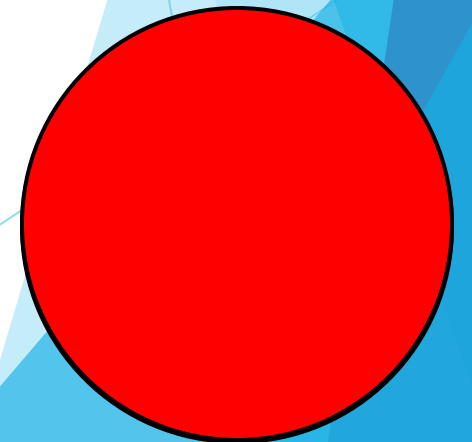


## Party of two

What are intersections of skills  
between your two content areas that  
can be crosscut?

(Party time - 5 minutes)

**5 minutes**





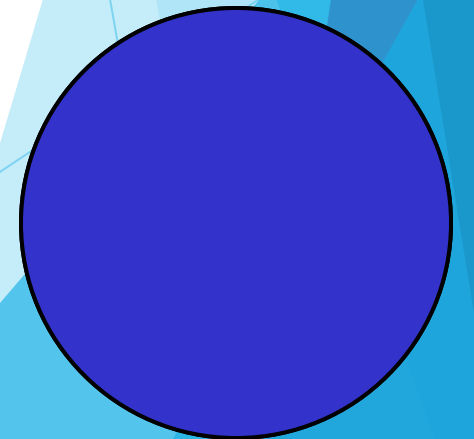
## Party of four:

Share your ideas.

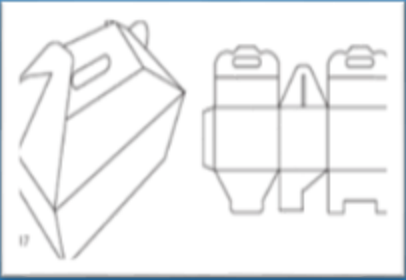
How does instruction need to shift in order to align to these practices that are shared among your content areas? Chart the shifts  
- Go visual.

(Party Time: 10 minutes)

**10 minutes**



# How can we create crosscutting lessons and units?



## Contextualization

Lessons are linked by a specific context (fairytale, the Revolutionary War, etc.)



## Conceptualization:

Lessons are linked by a specific theme (scale, change, patterns, cause and effect, etc.)



## Problem-centering:

Lessons are linked by a real-world situation or problem that needs to be solved (Space Travel, Apps Creation, NYC Transit/LIRR delays)



# Elementary: Conceptualization

Conceptualization: Theme based: using the engineering and design process across disciplines (coding, art, music, circuits)

Demonstrating knowledge through coding





# Elementary: Problem Centered: Wind Turbines



# Middle Schools

Contextualization: Students are asked to create a Cookie Business - drawing upon Family Consumer Science, Art, Business and Coding Skills.

- They are required to create the cookie, deciding on their nutrient values and variables impacting taste.
- They create their own packaging.
- They create advertisements through art and/or coding.





# High School: Problem-Centered

## SySTEM 2 Drones





# Building Your Own

## 2019 Curriculum Planning Template

Byosset Curriculum Planning Template	
Title:	Subject/Course:
Unit Topic:	Grade: Designer(s):
Stage 1- Desired Results	
Purpose of the Learning/Learning Targets:	
Essential Questions:	
Content Understanding •	Skills: •
Stage 2- Assessment Evidence	
Performance Tasks and/or Other Evidence •	
Stage 3- Learning Plan	
Scope & Sequence	

# Teacher Support: Year at a Glance

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN
	Marking Period 1												Marking Period 2												Marking Period 3														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
<a href="#">Reading</a>	Interpreting Characters: The Heart of the Story					Reading the Weather, Reading the World					Interpretation Book Clubs: Begin Study of Rev. War SS					Reading History: The American Revolution					Curriculum Based Review					Historical Fiction: Book Clubs					Reading with the Lens of Power and Perspective								
<a href="#">Writing</a>	The Arc of Story: Writing Realistic Fiction					Boxes and Bullets: Personal and Persuasive Essays <b>(NEW: Treasure Chest has new sequence)</b>					The Literary Essay: Writing about Fiction (+compare/contrast mini-bend from TC)					Bringing History to Life					Curriculum Based Review					Historical Fiction					<b>Comics: Writing in Pictures</b> 17-18 Journalism								
<a href="#">Math</a>	Performing Arithmetic within 1,000,000												Factors and Multiples		Fractions and Decimals					Relating Fractions with Decimals			2D Figures		Angles and Circles		Perimeter and Area		Review										
<a href="#">Science</a>	Changing Earth												Energy Works												Plant and Animal Structures														
<a href="#">Social Studies</a>	Geography of NYS, Native American Indians of NYS, Algonquians and Iroquois				Exploration: Vikings, Columbus, Hudson, Champlain, Verrazano, Europeans, and Fur Trade				Colonial Times				The Revolutionary War in NYS					American Democracy			Government					Urbanization													
<a href="#">NYS SS Toolkit</a>	<a href="#">New York Geography 4.1 and 4.2</a>					<a href="#">Manhattan Purchase 4.3</a>					<a href="#">Government and Citizens 4.4</a>					<a href="#">Call for Change 4.4 and 4.5</a>					<a href="#">Industrialization 4.6</a>					<a href="#">Immigration 4.7</a>													

What is your district  
already doing?

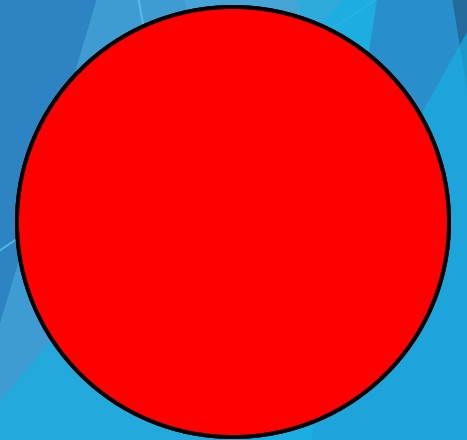
What could be your  
next step toward  
*Preparing for  
Tomorrow's World  
with Today's  
Curriculum?*

Dream Big.



Turn and Talk

5 minutes





# Question and Answer