

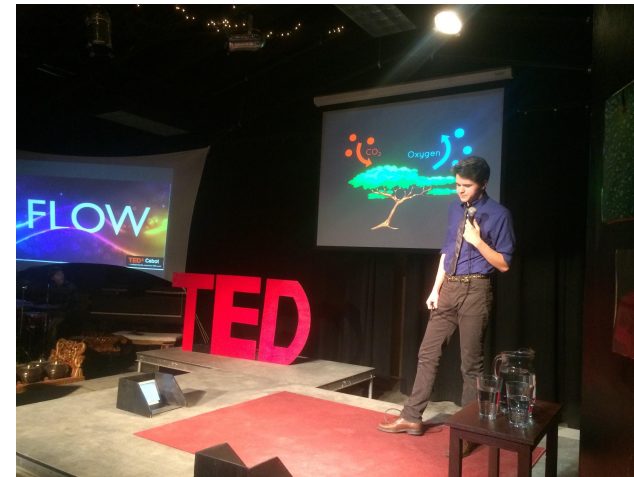
CABOT HIGH SCHOOL : 2018-2019

CURIOSITY, CREATIVITY + DESIGN

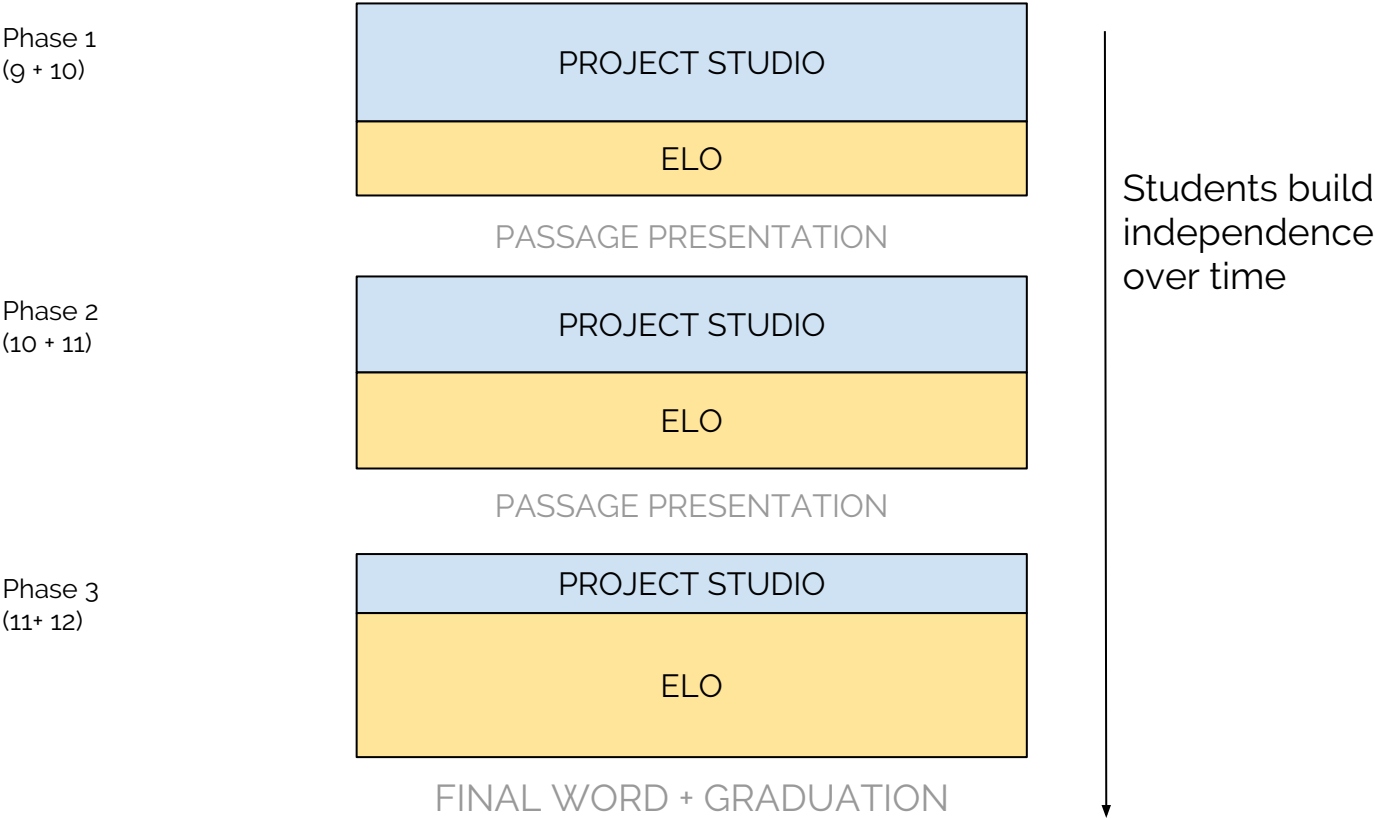
CULTURE + RELATIONSHIPS

AUTHENTICITY

HIGH QUALITY PROJECT-BASED LEARNING



A NEW APPROACH TO SUPPORTING STUDENT PROGRESSION



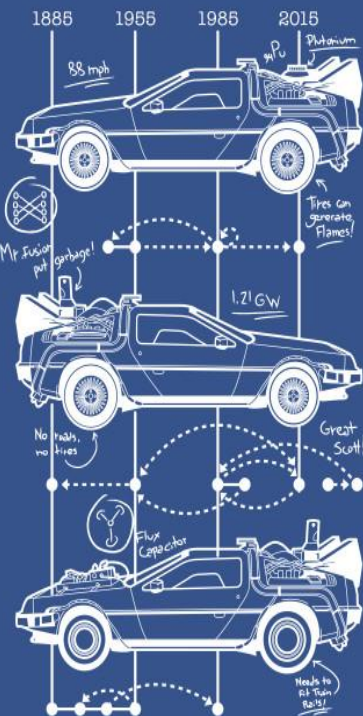
8:25- 9:15	Math II & Spanish I	Collaborative Planning + PLGs	
9:15 - 10:00	Math I & Spanish II		
10:00 - 11:10	Morning Project Studios Students choose between two studio themes. Projects are interdisciplinary + thematic. They are standards based and must result in a variety of "deliverables" showcased in a public exhibition of learning.	STUDIO A	STUDIO B
11:10 - 12:00	ARTS BLOCK •Design Tech/Visual Arts •Performing Arts (Music, Dance, Drama) When applicable, Arts classes will integrate with one of the concurrent projects. The Arts block is also a time for skill building to enhance skills necessary for projects. When integrating with a project this time can be used flexibly as needed. Alternatively, an arts class can also run on its own when appropriate.		
12:00 - 12:20	LUNCH		
12:20- 1:35	Afternoon Project Studios	STUDIO A	STUDIO B
1:35-2:20	Open Studio Advanced Math Accelerated Spanish AP Course Work	CALL BACK : A time for students to work with teachers and other students for extra support and time to work on content specific proficiency tasks. OPEN STUDIO : Extra practice time for music and art, Genius Hour (individual projects of choice), homework, EXTENDED LEARNING OPPORTUNITIES (ELO) : As students advance from each phase, there is an increased focus on leveraging outside learning opportunities. internships, college coursework and online classes, entrepreneurship, shadowing and site visits.	
2:20 - 3:00	X BLOCK:	Advisory 2x Week, Physical Activity (2x Week) : Yoga/Mindfulness, Dance, Sports (built-in. travel time for away games), Interest Driven (1x week): knitting, bluegrass, Cabot X- day style activities	

Passage Presentations



- Students present before their community
- Teachers prepare students for success
- Students share portfolios of work as evidence
- Presentations reflect academic and personal growth

Students will prepare and present Passage Presentations at the end of Phase I and Phase II. Presentations are a formal celebration + display of their growth, accomplishments and demonstration of proficiency before an audience of their peers, family and teachers. Students must successfully pass a Passage Presentation to advance to the next phase. Graduation/Final Word serves as culminating passage for Phase III students.



Ripples Through Time | Trimester 1, Morning Studio

Social Studies/English

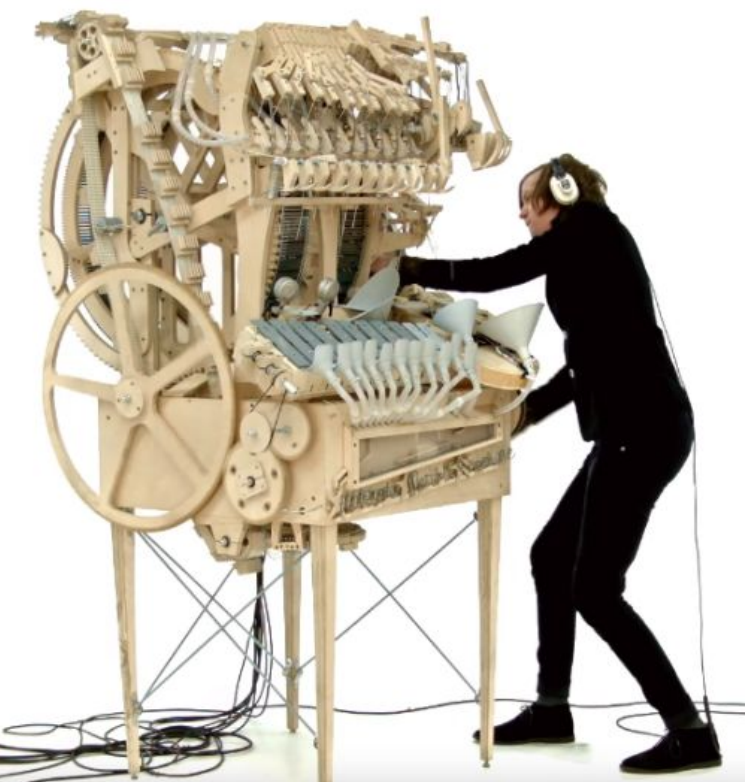
Throughout time there have been social elements that have had a permanent evolving place and role within society. Technology has continued to play an intricate role in our daily lives and although these technologies seem new to us their roots extend far beyond their current forms. Together we will explore an invention or technology from the 19th century with the focus of what effect did this technology have then and what impact does it have now. Working to answer the question of how has this technology changed and adapted over time, as well as identifying and theorizing the forces that change technology and their effects upon society. Our work will culminate in a public 'Technology Through Time' museum exhibit. The journey that your technology took from its original form in the 19th century to its current form is a story in itself, and beyond in how we envision that technology in the future. We will tell this story to understand the forces of society that model and shape the world around us. The effect that we as a culture have on technology and the impact that technology has on us as an individual.

Driving Questions

- How have the inventions of the past created our complex lives today?
- In what ways does technology reflect and inform our society?
- In what way does the evolution of technology tell the story of a society over time?

Proficiencies

- Historical Thinking
- Civics, Government and Society
- Inquiry



Sounds of Science | Trimester 1, Morning studio

Physics/Biology/Arts

Sound is all around us, and from before we are born our sense of hearing is how many of us first learn about the world we are about to enter. Sounds warn us of danger, tell us when someone is happy or sad, and through the manipulation of sound, music allows us to convey meaning beyond what is capable through words alone. Yet for all of its importance, sound is nothing more than waves of compressed air hitting our eardrum that our brains interpret as meaningful.

In this project we will explore the physics of sound, the biology of hearing, and the art of making music. We will learn how the manipulation of columns of air and vibrating objects create different sounds, and use that knowledge to create instruments. We will explore how our brain interprets sound, and why different sounds evoke specific emotions. The project will culminate of a performance of new music written by students, performed on instruments they created.

Driving Questions

If sound is just vibrating air, where does music come from?

How does an understanding of physics lead to a better sounding instrument?

How can a simple piece of skin (our eardrum) hear such a wide variety of sounds?

Can you compose exciting and engaging original music without any formal training?

Proficiencies

Science:

- Stability and Change
- System Models
- Energy and Matter
- Structure and Function
- Scientific Thinking

Arts:

- Creating + Performing



Startup! | Trimester 1, Afternoon Studio

Social Studies / English / Mathematics / Arts

Using principles of design thinking, student teams research a pressing problem that deserves an entrepreneurial solution. The students then develop a product or business that offers the solution to the problem. This open ended learning expedition offers students to do a deep dive into content areas/skills of their choice while building a common understanding of innovation. Students will submit their startup concepts to Launch VT EDU competition for a chance to win nearly \$25,000 to support the business idea.

Driving Question

What problems or pain points do potential customers experience? What can you create to solve that problem?



Proficiencies

- Social Studies: Inquiry + Financial Literacy
- ELA Speaking and Presentation
- ELA Writing
- Mathematics: Statistics + Probability
- National Core Arts Standards: Creating / Producing



Should I Eat This? | Trimester 1, Afternoon Studio

Biology/Ecology/English

Making healthy choices is an important skill for any person to develop, but when it comes to food, it can be especially challenging. In a day and age when the majority of Americans are disconnected from the cultivation of their food, it is easy to be misled. There are endless diets, fads, and shortcuts that are marketed as healthy, and each has a different rationale for why it's the right choice to make.

In this class, we'll examine a number of diets and evaluate the strengths of their claims and develop recipes that reflect healthy choices. We'll learn about different methods of agriculture, visit local farms, and look at the ecological impacts of farming. Our ultimate goal is to produce a cookbook that includes interviews with farmers, helpful information about fad diets, and delicious recipes developed by students.

Driving Questions

- How do your food choices impact your health?
- Is modern agriculture a sustainable endeavor?

Proficiencies

Science:

- Patterns in nature
- Stability and change
- System models
- Structure and function
- Scientific thinking

English

- Writing
- Writing: Research
- Speaking and Listening
- Speaking and Listening: Presentation



Eye in the Sky | Trimester 2, Morning Studio

Contemporary Issues/English

From online stores to the Pentagon, drones have become a magnet for American spending. Over the last few decades the United States, and many other nations, have invested billions of dollars in the development of Unmanned Aerial Vehicles (UAVs) for defense and military purposes. These vehicles are used to perform a variety of tasks including: disarming explosives, gathering data on enemies, patrolling dangerous regions and executing strike missions on individuals and installations. This emergence of drones into our military leads to a few questions: What are the ethics of combat using drones? What privacy dilemmas can we identify? What are the long-term uses for UAVs in our society? How does the use of unmanned vehicles in combat shape the global perception of the United States?

We will investigate the controversies surrounding the use of drones for surveillance and military tactics. We will work to understand both sides of these issues and evaluate the future of drones in our society. We will investigate the industrial and private uses of drones in our everyday lives. This will culminate in a public exhibition where teams will design and build their own drones that will be used to deliver emergency medical supplies during a mock disaster.

Driving Question

- What are the social and political issues surrounding the use of drones in our military and society?
- What are the future use of drones to support the growth and improvement of our society?

Proficiencies

Global Awareness

Civics, Government and Society



Debunk This! | Trimester 2, Morning studio

Science/Arts

In the style of hit shows like National Geographic's "Brain Games" and Discovery Channel's "MythBusters" we will develop and produce several episodes of our very own show, "Debunk This." Students will be challenged to research "controversial" science topics and set out to prove them to be true or false.

Possible topics include: evolution, the age of the earth, global warming, is the earth flat?, chemtrails, fad diets, vaccines, GMO vs organic, and many others.

Driving Question-

How can we use the art of storytelling to teach others about the world?

Proficiencies

- Scientific thinking
- Arts: Create, Performing/Producing, Connecting



Chemistry and Conflict | Trimester 2, Afternoon Studio

Chemistry/Social Studies

As a culminating project in a Chemistry and Social Studies learning expedition, students will create a professionally printed book called **"Chemistry and Conflict."**

To create this book, pairs of students will work together to research the relationship between a chemical element or compound to both a historical and contemporary conflict. For example - iron; it's relationship to the industrial revolution and later. Students will engage in extensive research, leading to the writing of a research paper. Each paper will include the discovery of the chemical element or compound, the chemical properties, the historical conflict, contemporary conflict and a proposed solution to the contemporary conflict.

Driving Question-

How has chemistry driven human conflict and changed over time?

Proficiencies

- Historical Thinking
- Inquiry
- Global Awareness
- Patterns in nature
- Stability and Change
- Energy and matter
- Scientific Thinking



Sci Fi Movie | Trimesters 2 + 3, Afternoon Studio

English/Arts

Pre-Production

At the start of this project we will examine a variety of Sci Fi premises (multiverses, artificial intelligence, alternate history, alien contact, social science fiction, etc) to generate a collection of storylines and script synopsis. From there we will choose a final storyline that we will produce into a feature-length film. During this pre-production phase, we will develop our creative writing chops while exploring various techniques and approaches to writing for the screen. Additional components will include production design, shooting schedules, location scouting and production management..

Production + Post Production

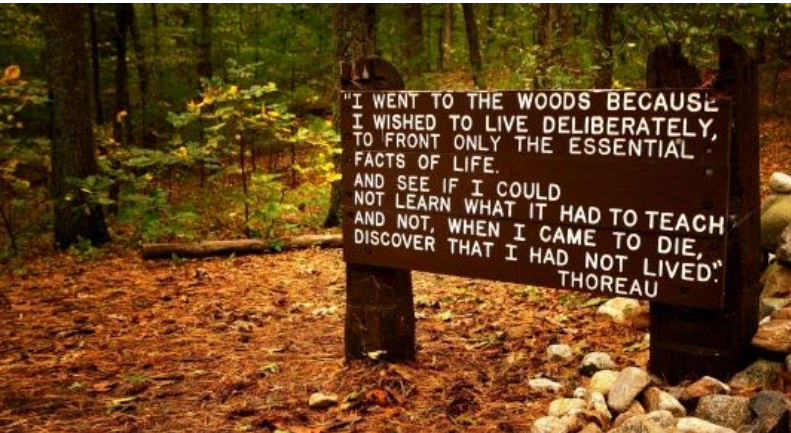
The production and post-production phases will focus on tasks such as camera operation, lighting, sound, acting and editing. The film score will be performed and recorded by the band.

Proficiencies

- ELA: Reading, Writing and Language
- Arts: Create, Performing/Producing, Connecting

Where's Walden? | Trimester 3, Morning Studio

Biology, Ecology, English



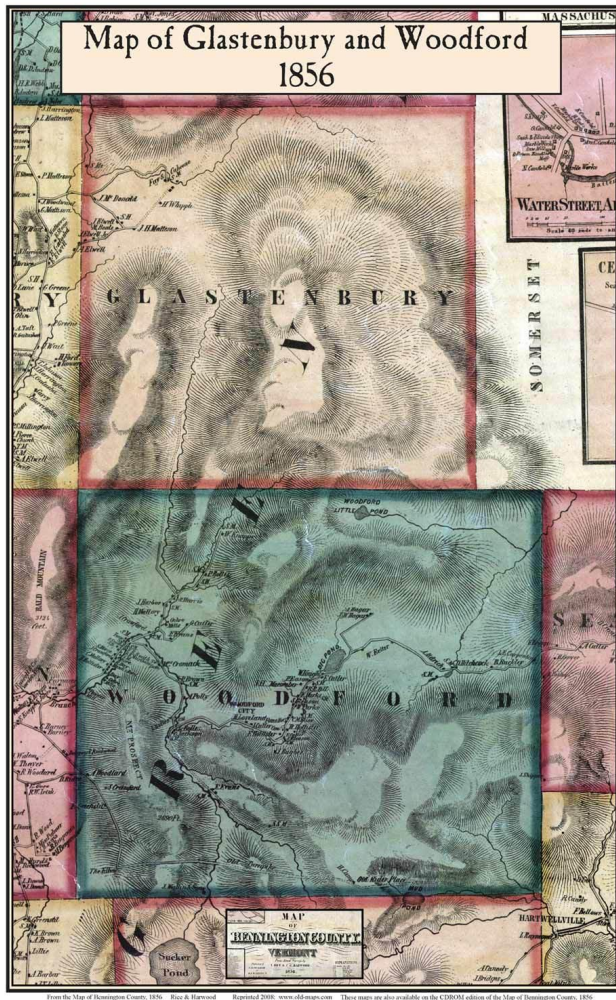
The landscape of America has always had a huge influence on the landscape of American Literature, but it has a story of its own to tell, if you know how to read it. Using Thoreau's experiences and writings, we will explore the meaning of "the wild," self-reliance, and living in community. This unit will also emphasize hands-on, field-based learning with the goal of fostering stewardship as well as scientific and artistic inquiry. Students will hike local areas and draw and journal in response to close observation. Students will learn how to observe and "read" the forested landscape of New England, in order to determine its history and its community.

Driving Question-

- How can we use methods of field biology to discover and share the story of our local ecology and community?
- What does it mean to be a member of a community?

Proficiencies

- Patterns in nature
- Scientific thinking
- Stability and change
- Reading
- Writing
- Language



05262 "Cracking the Case"| Trimester 3, Morning Studio

Social Studies/Arts

This project will guide students through historical and local famous cold cases. Students will choose a mystery to investigate, seek out and analyze both primary and secondary sources, develop a theory as to what happened in the mysterious historical event, and support their theory with evidence from their research. Their work will culminate in a *Serial* style podcast that presents the mystery, the evidence and their theory to the audience so that they may take the knowledge and decide for themselves what actually happened.

Driving Question-

How can we use the art of storytelling to solve a mystery from the past?

Proficiencies

- Writing: Research
- Speaking and Listening: Presentation
- Historical Thinking
- Inquiry



Apocalypso | Trimester 3, Afternoon Studio

World History/Physics

Abstract: Human history is punctuated by the prolific rise and inevitable collapse of civilization after civilization. In this project, students will formulate hypotheses for these fluctuations, compare their hypotheses with historical evidence, map quantitative changes throughout history, and then create a narrative and mechanical representation of their findings. Their work will be exhibited at a public exhibition.

Humanities Context: Students will study the rise and fall of civilizations throughout history then develop their own cyclic theories of civilization. Students will create a research paper based on their hypotheses.

Engineering & Physics Work: Student will create physical manifestations of their social theories using mechanical apparatus. They will be given a blank template space to work within and specifications for their mechanism to mate with the larger class gear. Groups deconstruct their theories into logical steps and propose a way to mechanically represent each aspect of their theory. They will then begin the design and fabrication process.

Driving Question

What forces cause civilizations throughout history to rise and fall?

Proficiencies / Learning Targets

- Global Awareness
- Historical Thinking
- System Models
- Stability and change
- Energy and Matter
- Structure and Function

Class combinations offered in a three year cycle

		1st Trimester (Start - Dec)		2nd Trimester (December - March)		3rd Trimester (March - End of Year)	
		AM Studio	PM Studio	AM Studio	PM Studio	AM Studio	PM studio
Year 1	English						
	Social Studies						
	Science						
	Fine Arts						
Year 2	Social Studies						
	Science						
	English						
	Fine Arts						
Year 3	Science						
	English						
	Social Studies						
	Fine Arts						

Color Key

Eng./S.S.	Eng./Sci.	Eng./Arts	S. S. / Sci.	S. S./Arts	Sci./Arts
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