

IPSWWICH

CREATIVITY, CRITICAL THINKING AND MORE.

SUMMER ONLINE COURSE 2019



INNOVATIVE PRACTICES II

JULY 2019

Course Overview

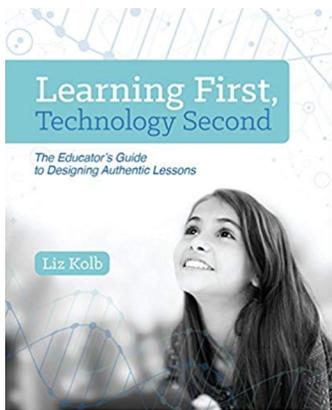
Innovative Practices II: Beyond the Device was created to build upon the momentum of the Innovative Practices I course offered in the summer of 2018. The goal was to continue the reinforcement of the integration and best practices of digital tools and resources available to educators ranging from the Elementary to High School level.

The modules offered in this course showcased how technology tools can create a variety of opportunities for students to create a product, validate and grow their ideas, and share it with others. Each module included access to books, articles, project examples, products and more to deepen understanding of these tools.



Modules Included:

- **Podcasting**
- **Blended Learning**
- **Digital Portfolios**
- **Gamification**
- **Advanced Google Apps**
- **Creativity with Google Slides**
- **Breakout Rooms**
- **Global Connections**
- **Geo Tools**
- **Open Ended Resources**
- **Genius Hour**
- **Digital Portfolios**



This course gave participants hands-on experience with technology and had them asking themselves: How can technology be leveraged in a way that amplifies or changes the learning experience for students? The common read for this course was *Learning First, Technology Second* by Liz Kolb.

This book explored how to successfully integrate technology tools by first identifying learning goals and then choose the technology tools that leverage authentic engagement, enhancement, and extension to support student learning known as the Triple-E Framework. Participants learned how to use this framework and create modified versions of the Triple-E Lesson Plan to successfully integrate technology.

All levels of technology skills were welcome whether educators were looking to gain confidence and learn new tools, fill in some tech knowledge gaps, or enhance the tech work they're already doing. This course was designed to strengthen current practices and provide professional development that was specific and personalized. To meet the needs of each educator, self-directed learning options were offered where they could select the amount and type of modules that fit their needs and customize the learning experience.

Participants completed an online orientation in June to learn more and get started with the course. Everyone reconnected online in July to network through collaboration, feedback, and reflection. They shared their curriculum with colleagues and the course instructor as their unit developed and will implement their unit during the upcoming school year.

This course allowed participants to validate what they are already doing, learn something new, and create experiences for students while collaborating and getting feedback from their colleagues. This network of educators worked continuously to learn, share, and discuss the implementation of meaningful learning experiences that will have a powerful impact on student learning this year.

Course Teachers



Amy Gregory

Amy Gregory is the Digital Learning Specialist for the Ipswich Public Schools. She previously taught Grade Five in Ipswich for 20 years and has served on numerous committees including the Technology Committee, STEAM Team, and School Council. She holds a B.S. in Elementary Education from the University of Hartford and a Masters in Education from the University of New England. She is a Google Certified Educator and has a passion for the evolving role technology plays in education and the creative problem solving process of innovation.

Elementary School Teachers



Melissa D'Andrea

School(s) and Grade Level (s): Winthrop School Grade 2

Unit: [Cultures Around the World](#)

Essential Questions:

- How do people adapt to or change their environment?
- How does geography help us understand why countries exist?
- How do the resources of an area affect its industries and jobs?

Featured Technology Tools:

Flipgrid, Podcasts, Digital portfolios, Google Docs, Google Slides, Genius Hour, Breakout Rooms.

About this Unit:

In this unit second graders will be discovering the world through different cultures. Along the way they will connect multiple understanding and find similarities and differences among the countries we explore. With technology students will be able to explore and investigate how people and countries survive.

Elementary School Teachers



Carrie Clasby

School and Grade Level: Paul F. Doyon Memorial School, Grade 4

Unit: [Grade 4 Science - Earth Changes](#)

Essential Questions:

- In what ways does movement cause change?
- How do natural disasters impact human life?
- How does the earth provide renewable and nonrenewable energy?

Featured Technology Tools:

I included a Blended Learning model to introduce lessons to students. Hyperdocs are present throughout the whole unit. Students will be assigned these through Google Classroom. We will use a Genius Hour concept for the Extreme Weather final project. I used OER's to give students an opportunity to explore more about the Grand Canyon and wind activity. I used PBS, Quizlet, Edpuzzle, Amazon Inspire, National Geographic, and Readworks in a variety of ways.

About this Unit:

This is our first science unit of the school year. The Earth Changes unit combines science and our second reading unit. Students will learn how movement causes change and how natural disasters impact humans. There are hands-on activities including erosion tables and mystery science experiments. The final project will include extreme weather research and how it impacts human life.

Elementary School Teachers



Lauren Gouzie

School and Grade Level: Winthrop School, Grade 3

Unit: [Weather, Climate, and the Human Response](#)

Essential Questions:

- How can information about weather be used to predict the weather patterns and climate of a region?
- How does the weather affect the people in a particular region?
- How can technology improve how people prepare for extreme weather?
- Why is it important to collect data about the weather?

Featured Technology Tools:

Hyperdocs, interactive agendas, Google Slides, digital science notebooks

About this Unit:

This unit combines science and math practices as students observe, collect data, and analyze weather patterns. They learn the difference between weather and climate, and design a weather barrier for a home in a particular climate.

Elementary School Teachers

Jennifer Grenier



School and Grade Level: Winthrop School, K-5

Unit: [Fractions Intervention](#)

Essential Questions:

- How can I describe and compare fractions?
- Why are fractions important in real life?
- What professions use fractions frequently?
- Can we survive without the existence of fractions?
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Featured Technology Tools:

Interactive slide shows, 3 act tasks using smart board, QR Codes, Educreations, and various other iPad Apps including Chatter Pix, numerous manipulatives, and the camera and video function.

About this Unit:

This unit is intended as an intervention or supplement to the 3rd grade fraction unit; is not intended to supplant a classroom unit of study. Common misconceptions will be targeted and foundational understandings from prior grades will be practiced. Math talks, interactive lessons, 3 act tasks, math lab stations, games, exemplars (open response questions), and a STEAM project as one summative assessment are all components teachers can choose from.

Elementary School Teachers



Kimberly Meaney

School(s) and Grade Level (s): Paul F. Doyon Memorial School, Grade 4

Unit: [Grade 4 Science - Energy](#)

Essential Questions:

- In what ways does movement cause change?
- In what ways does energy cause change?
- How do we know that things have energy?
- How can the transfer of energy alter systems?

Featured Technology Tools:

Google Classroom, Collabrify, Hyperdocs, Padlet, YouTube

About this Unit:

Students will explore the difference between matter and energy. Through hands-on-learning students will use evidence (measurements, observations, patterns) to construct an explanation. Students will understand that Energy can also be transferred from place to place by electric currents, which can then be used locally to produce motion, sound, heat, or light.

Middle/High School Teachers



Heather Chang

School(s) and Grade Level(s): Middle & High School, Grades 6-12

Unit: [Multi-Media Presentations & Production in the Library](#)

Essential Questions:

- How can I create a logical and organized podcast or video?
- How can a podcast or video influence those who view/listen to it?
- How can my music selections for my podcast or video change the overall feeling of my presentation?
- How does poetry or literature contribute to our understanding of ourselves, others, and the world?
- How can collaboration with others extend, challenge, and broaden our ideas?
- How can I best express my learning on a topic assigned through my multi-media presentations?

Featured Technology Tools:

Audio software or applications, video cameras or iPads, iMacs with iMovie software, green screens.

About this unit:

Creating multi-media presentations through video or podcasting gives students a fun and creative way to express their learning using technologies that are commonly used in social media in the 21st century.

This unit can be modified for almost any subject area and allows teachers to plan multi-media projects that can be made in the library or modified for your classroom.

The school librarian will assist as much or as little as you would like to work with you and help you brainstorm multi-media presentations and lesson plans and procedures to guide your students through the creative process and help them show off what they have learned and share it with the world either individually or collaboratively with other students.

Middle School Teachers



Joanne Ryan Walsh

School and Grade Level: Ipswich Middle School, Grade 7

Unit: [Statistics](#)

Essential Questions:

- How can we look at and interpret data in a meaningful way so as to make reasonable predictions about the data as well as use the predictions to make decisions in the real world?
- Are claims made truly valid or not?

Technology Tools:

Google Classroom, Kahoot, online math dictionaries, Google Slides, Khan Academy, Classzone by McDougall, YouTube, Chromebooks, Hyperdocs, Edulastic.

About this Unit:

Data is used in a variety of ways in real life. Claims are made based on the data collected. How the data is collected, organized, and analyzed is an important way to decision making in a variety of setting. The quality of the data varies based on how it is collected.

Middle School Teachers



Diana Somers

School(s) and Grade Level (s): Ipswich Middle School, Grade 7

Unit: [Ratio and Proportions](#)

Essential Questions:

- How are fractions, decimals, and percents related?
- How can you find two ratios that describe the same relationship? Is there more than one way to find another ratio?

Featured Technology Tools:

Eduastic, Hyperdocs

About this Unit:

The students will solve problems using proportions. Using unit rate and percents the students will find the missing part.

High School Teachers



David Wood

School(s) and Grade Level (s): Ipswich High School, Grades 9-11

Unit: [Choice Memoir](#)

Essential Questions:

- How does reading stories about others' lives allow us to better understand our own?
- How do stories reveal individual and societal values and priorities?

Featured Technology Tools:

Blogger, Google Slides, Pear Deck, Google Drive, Google Docs, Chromebooks.

About this Unit:

The choice memoir unit is a chance for students to explore a text that genuinely interests them, and to gain an understanding of what makes personal narratives so compelling. Working collaboratively in literature circles based on the text they chose, students will practice close reading and discussion strategies to better understand the memoir's characters and story arc. The unit concludes with students writing and publishing their own memoirs.

High School Teachers



Kendall Downing

School(s) and Grade Level (s): Ipswich High School, Grades 9-10

Unit: [Organization 101](#)

Essential Questions:

- How can I smoothly transition and adjust to the High School class schedule and common teacher expectations through the usage of personalized organization skills and habits?
- How can I research, trial and implement the organization strategies that work best for me as a student?

Featured Technology Tools:

GoogleDoc, HyperDoc, Google Keep, Google Slides, Piktochart

About this Unit:

This unit, geared towards all underclassman (especially incoming Freshmen) will give students an opportunity to adjust their organizational habits and skills. The ultimate goal is for these students to discover what works best for them; an individualized and personalized approach to keeping up with the many responsibilities that comes with being in High School. The strategies and tools utilized throughout this unit will not only assist students with organization skills in school, but can also be a helpful life skill with organizing their busy lives outside of school schedules, even after they have graduated into the real world!

High School Teachers



Lisa Ellrott

School(s) and Grade Level(s): Ipswich High School, Special Education

Unit: [The Hate U Give](#)

Essential Questions:

- How does reading help us gain empathy for others?
- How does reading influence us and possibly inspire us to solve problems?
- How can we inform others about important issues?

Featured Technology Tools:

QR Codes, Stormboard, BreakoutEDU, Poll Everywhere

About this Unit:

In this unit, students will read Angie Thomas's novel, *The Hate U Give*. Prior to reading they will engage in the blended learning station rotation model to develop background knowledge about the Black Lives Matter movement. Each station will also have a link to a "Stormboard," a virtual whiteboard with virtual post-it notes, through which all groups will communicate and collaborate. Once students read the novel, they will use BreakoutEDU.com to design their own breakout games to reinforce understanding of characterization, conflict, plot, figurative language, and theme.

High School Teachers



Brendan Hughes

School(s) and Grade Level(s): Ipswich High School, Grades 10-11

Unit: [Probability \(Quantitative Reasoning - Grade 12\)](#)

Essential Questions:

- Where and how does probability theory play a role in our everyday lives?
- How can we use our understanding of probability to make informed decisions that benefit us?

Featured Technology Tools:

Google Forms, Nearpod, Breakout Rooms, Genius Hour

About this Unit:

Probability surrounds us each and every day. Decision-making, sports, weather, game-shows, and many other aspects of life are heavily reliant on the concept of probability. This unit explores probability through the lens of the world around us and requires students to show their comprehension through exploration, ideation, and innovation.

High School Teachers



Claire Powers

School(s) and Grade Level (s): Ipswich High School, Guidance

Unit: [Senior Guidance Seminar](#)

Essential Questions:

- Based on my previous inventories, research, and exploration in Naviance, what is my path and how do I get there?
- What should I do after high school?
- Is college the right choice for me?
- What resources are available to me in this process?

Featured Technology Tools:

Naviance, Common Application, Google Classroom, HyperDocs

About this Unit:

As seniors prepare for their post-graduate college and/or career path, there are many things to consider and steps to take. This guidance curriculum recaps post-graduate options that we have been exploring with students throughout their high school years, reminds students of the tools and resources available to them, and then focuses on the process of applying to four-year colleges. Because more than 80% of our high school seniors apply to four-year programs, it is important that they are aware of the tasks that need to be completed, types of applications, financial aid available, and processes internal to the high school. Students work individually with school counselors on the specific requirements for their chosen colleges, but this session, delivered fall of senior year, allows us to ensure that all students receive the relevant information needed and are thinking about next steps in time to meet application deadlines.

High School Teachers



Jennifer Starrett

School(s) and Grade Level (s): Ipswich High School, Guidance

Unit: [Virtual College Tour Exploration Unit](#)

Essential Questions:

- How can I explore college campuses without the ability to visit in person?
- What am I looking for in a college campus?
- What factors draw me to a particular campus?
- How can I use the college search to better prepare myself for life after high school?

Featured Technology Tools:

Google Maps, Chromebooks, Nearpod, YouTube

About this Unit:

Juniors and seniors will learn how to access virtual college tours to explore a variety of different campuses. As campus will be “home” for the next four years, it is important that they will be able to narrow down which type of college they would want to visit in person or end up applying to based on their experience with the virtual tours. It is important for them to do research to find an environment they are comfortable with.

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