



AN INTRODUCTION

BY DR. AYELET SEGAL

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About the Author

Dr. Ayelet Segal has devoted the last 25 years exploring problems in the realm of Cognitive Psychology, Education and Technology, in both academia and industry.

Dr. Segal earned her Master's and PhD in Cognitive Psychology. Education and Technology from Teachers College, Columbia University in NYC, USA. Her research focuses on embodiment theory and gestural interfaces to promote cognition and learning. She conducted and published the first research of children learning with the iPad. She also holds a Master of Arts in Interactive Media from Middlesex University in London, UK. She is the Head of Education at TouchCast, a leading interactive video platform for students and educators. Dr. Segal is an international speaker and a published author and an expert on how students learn with video. She is the co-author of the chapter 'Embodied Cognition and Learning Environment Design' of the book 'Theoretical Foundations of Student-centered Learning Environments.' (New York: Routledge. By D. Jonassen and S. Lamb (Eds).) Ayelet has achieved international recognition and critical acclaim and has been honored with international awards. She was invited to present at conferences such as ISTE14, FlipCon15, CUE16, CES16 and to moderate flipped classroom panels at ISTE2015 and SXSWedu2016. Recently, she was a guest lecturer at the UPenn educational leadership program.

AN OPPORTUNITY TO ENGAGE/



Connecting with young learners presents amazing potential. Technology offers a wealth of tools to engage students, but discovering these tools is not an easy task. Most children appear to have a sense of what is considered educational software and immediately disregard it as something that is not organic to their ambitions. Finding a tool that channels their expectations and aspirations helps them to sustain the engagement and makes the learning experience meaningful and immersive. This YouTube generation curates knowledge through video, and increasingly communicates through broadcasting. In the social media world they're growing up in, anyone can be a broadcaster. With TouchCast, teachers can now use broadcasting tools to present information and to let their students communicate in a way in which they feel most comfortable and most creative.

TouchCast allows educators and students around the world to easily create comprehensive and engaging interactive videos... and they have fun while doing it. All you need to do is look into the eyes of these youngsters as they say: 3, 2, 1, Action!

How do children & adolescents communicate & learn today?

VISUAL SEARCH

Until recently, most young learners used a textbook or an encyclopedia to find information and feed their curiosity. Today, most students turn to the web first and increasingly start with YouTube, even before Google. The immediacy and fluidity of video on almost every topic is quickly making it a primary medium for education and knowledge.

IMMEDIATE EXPLORATION

Children have access to an almost infinite wealth of engaging online information to satisfy their curiosity.

SHARING 24/7

Children express themselves through digital sharing. They're not only creators. With social media, they're publishers and broadcasters.

POSITIVE SOCIAL FEEDBACK

Children give each other virtual encouragement, through 'Likes' (Facebook), 'Hearts' (Tumblr) and 'Favorites' (Twitter) and 'Thumbs' (YouTube).

MULTIPLE INFORMATION LAYERS

Children are engage with many sources of information simultaneously.

DIGITAL ARTICULATION

Children communicate in links, images and video. It appears that as we collectively evolve, more and more of our memory is stored on the cloud and not in our heads. This is giving rise to a new form of cognitive learning process the notion of retention of information changes, and the notion of retrieval evolves.

What 21st century skills should we be teaching our children?

INFORMATION LITERACY

Access and Evaluate Information

- Access information efficiently (time) and effectively (sources)
- Evaluate information critically and competently

Use and Manage Information

- Use information accurately and creatively for the issue or problem at hand
- Manage the flow of information from a wide variety of sources

TOUCHCAST ADVANTAGES

Easy Access to Various Types of Information

- vApps of web pages, YouTube, Twitters, polls, etc.
- The web INSIDE your video

Use and Manage Information Creatively

 Users can role-play; use a green screen; collaborate or perform alone; broadcast a lecture, a debate, an interview, or a documentation process

Use Information from a Wide Variety of Sources that is Stored in One Place

 Users use various vAapps that could be stored, managed and accessed all in one place

MEDIA LITERACY

Create Media Products

- Understand and utilize the most appropriate media creation tools, characteristics, and conventions
- A new form of learning is born when students produce media around a theme and learn by doing

INFORMATION, COMMUNICATION & TECHNOLOGY LITERACY (ICT)

Apply Technology Effectively

- Use technology as a tool to research, organize, evaluate, and communicate information
- Use digital technologies communication/networking tools, and social networks appropriately to access, manage, integrate, evaluate, and create information to successfully function in a knowledge economy
- Become effective communicators of ideas and knowledge

TOUCHCAST ADVANTAGES

Create Interactive Video - Broadcast Products

 Allows active learning experiences by creatingMedia Products that require a production process with planning, organizing, and understanding technical procedures

TOUCHCAST ADVANTAGES

Apply Technology Effectively

- Use TouchCast as a tool to research information for learning assignments, organizing content, evaluating self and peers, and communicating information in the classroom and outside
- Peer to peer learning through the video network
- Use TouchCast to become an effective communicator of ideas and knowledge by creating broadcasts that require pre-production, writing scripts, editing, selfevaluation, and reflection

SOURCE: Institute of Museum and Library Services 2012



HOW CAN TOUCHCAST HELP TEACHERS?

TouchCast is a great content creation tool for teachers that takes the flipped classroom concept to a new level. Different from prior examples of flipped classroom lectures, a TouchCast is not just a static video of a lecture. Yes, TouchCast offers a simple way for the teacher to include a wealth of related content and interactivity inside the video. The educator is able to not only convey the subject matter in a compelling manner (in the form of video), but he can also include supplemental information. By including these interactive elements—from web pages and pictures, quotes, quizzes and polls—the educator significantly increases student engagement.

FLIPPED CLASSROOM

Teachers can create lecture-based TouchCasts for students to watch outside the classroom. This frees up classroom time for group discussion and other types of active, two-way learning, including the opportunity for students to create TouchCasts in class.



STUDENT ASSIGNMENTS

Students have immediate access to immediate information and a variety of resources to create rich TouchCasts for learning tasks. Students can use different modalities of broadcasting for self-expression: they can work in groups or by themselves; they can role-play, utilizing the green screen in a lecture, debate, interview, documentary, or other broadcast formats.

MEANINGFUL LEARNING EXPERIENCES

TouchCast allows teachers to easily incorporate active learning experiences into the classroom and at home, leading to more meaningful learning experiences.

ENGAGING STUDENTS

Utilizing TouchCast allows teachers to speak the same "language" as their students.

ASSESSMENT

TouchCast helps teachers to easily monitor and assess students' understanding of the subject matter by allowing observation of their output. Teachers can also use the quiz and poll vApps for formative assessment.

DIGITAL LITERACY SKILLS

With TouchCast, teachers can help develop media literacy skills in unprecedented depth as students and teachers go through a production process that has historically been the exclusive domain of professional producers.

EASY COMMUNICATION

TouchCast allows convenient and immediate communication inside and outside the classroomenvironment with students and parents.

CONTENT ACCESSIBILITY AND STORAGE

The program provides simple digital storage of students' and teachers' TouchCasts, facilitating easy access and sharing.

BRIDGING THE GENERATION GAP

Teachers connect and 'speak' the children's language. TouchCast is something students become incredibly passionate and excited about as it reflects their aspirations to improve as digital communicators.

LESS TIME NEEDED TO CREATE RICHER LEARNING

TouchCast makes it easy for teachers to create content from various resources and different media formats. The ratio between time spent on creating the content and the educational value of that content as a resource is unprecedented. A five-minute TouchCast can result in an hour-long journey of discovery and learning as a result of embedding other resources into the TouchCast.

Interactive video lectures & demos produced by teachers

MATH /

POSITIVE AND NEGATIVE NUMBERS

In this example, the teacher explains positive and negative numbers. He uses vApps to show images that illustrate different examples of negative and positive number usage in the real world, such as a thermometer. He asks the students questions throughout the presentation (he have also used the quiz vApps for this purpose). http://www.touchcast.com/mrfoxbjs/23-Positive--Negative-numbers



FOR MORE EXAMPLES CHECK OUT: TOUCHCAST 'STEM CHANNEL'

SCIENCE /

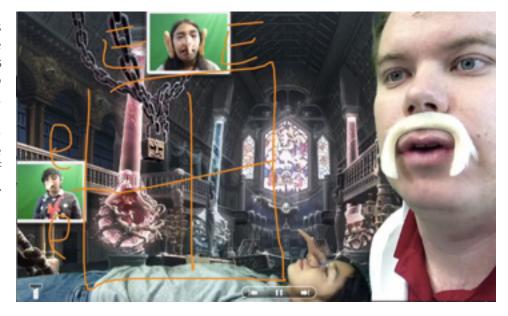
INTRODUCTION TO EARTHQUAKES

In this example, the teacher explains how earthquakes occur. She uses vApps for students' assessment throughout the presentation; a Poll Vapp to view her students' votes in real time; a Google doc (through the web-page Vapp); and Quizlet to assess their in-depth knowledge. http://www.touchcast.com/stcscience/earthquakes/?ref=stcscience&p=channel



INTRODUCTION TO GENETICS

In this example, the teacher explains the Punnett Square as part of the Genetics unit. He uses vApps throughout the presentation to exhibit photos, diagrams, drawings, and text. He also utilizes the green screen, integrating an image of a lab as the background. And lastly, the teacher analyzes the traits of one of the students, who acts as a zombie. http://www.touchcast.com/flipsci 93c9836759.



FOR MORE EXAMPLES CHECK OUT: TOUCHCAST 'STEM CHANNEL'

SCIENCE GLOBAL CLASSROOM /

GlobalCOlab

The GlobalCOlab project is a collaboration between five teachers from different countries, who came together to create a global classroom to explore scientific concepts. In this project, students use TouchCast to engage with hands-on science curriculum, to present different concepts to their peers overseas and to review each other.

http://www.touchcast.com/
educasts/2b579443d2/?
ref=search&q=Global



HISTORY /

WORLD WAR I

In this example, the teacher narrates events from World War I in the first person perspective, using vApps to present photos, posters, and documents to illustrate and support the narrative.

http://www.touchcast.com/ middlebee/The-Latest-on-World-War-I

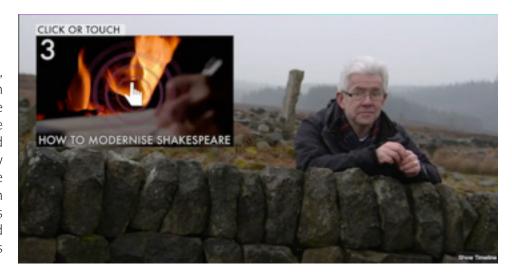


FOR MORE EXAMPLES CHECK OUT: TOUCHCAST 'SOCIAL STUDIES CHANNEL'

ENGLISH /

THE LANGUAGE OF MACBETH'S WITCHES - BBC BITESIZE MASTERCLASS

In this BBC Bitesize Masterclass, made with TouchCast, the English poet Ian McMillan presents The Language of Macbeth's Witches. He uses video vApps, the whiteboard and an image vApp to discuss how Shakespeare carefully crafted the language, making riddles, oxymoron s and puns . He uses question vApps to interact with students and introduce them to the words Shakespeare invented.



http://www.bbc.co.uk/taster/ projects/bitesize-shakespeare

SCOOPING WORDS AND PHRASES

In this example, the teacher demonstrates to early readers how to scoop words when reading out loud. She reinforces her presentation by using the photo vApp and drawing on images with the whiteboard tools.

http://wwwtouchcast.com/ mrs_c_sis/

scooping_words_and_phrases/?ref=
mrs_c_sis&p=channel



FOR MORE EXAMPLES CHECK OUT: TOUCHCAST 'ENGLISH ARTS CHANNEL'

TECHNOLOGY /

Teachers create a TouchCast to train other teachers to use different software

HOW TO USE TOUCHCAST

In this example, the teacher presents TouchCast to both students and teachers. He includes various vApps such as: Google Map, Images and Browser vApps. He also uses the Whiteboard tool to draw on top of the map and the images. He uses the green screen feature to transport the user through time and space.

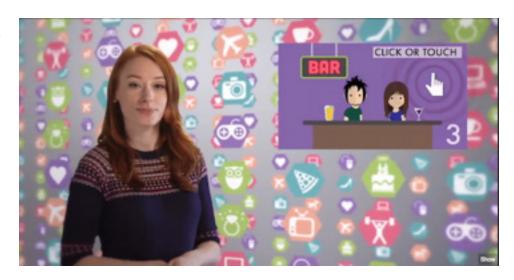
http://www.touchcast.com/mtmi/68a6a7a829



For MORE EXAMPLES CHECK OUT: TOUCHCAST STEM CHANNEL

COMPUTATIONAL THINKING - BBC BITESIZE WEBSITE

A review of computational thinking by TED speaker Dr. Hannah Fry. In this educational BBC Taster Bitesize Masterclass made with TouchCast, Dr. Fry demonstrates how the problem-solving process can help in finding the perfect partner. http://www.bbc.co.uk/taster/projects/bitesize-computational-thinking



SCHOOL COMMUNICATIONS /

Teachers, principals, students, and school administrators use TouchCast to announce different messages to students and parents. These include an introduction, homework, schedule, school events and reminders. TouchCast allows schools and classrooms to have their own equivalent of a high production quality TV studio... just using iPads.

School announcements done by principle/teacher/students/school admin

THE NEW SCHOOL YEAR IS HERE

The teacher communicates information relating to the beginning of the new school year.

http://www.touchcast.com/ peter_dewitt/The-New-School-Yearis-Here



FLIPPED SCHOOL BOARD PRESENTATION

In this example, principal his school's reports on innovative teaching done to enhance creativity, engineering, and design-thinking across domains. This TouchCast includes testimony from both students and teachers, along with various class activities. It is a great example of how to create a high-quality production video for communication, using only TouchCast. This teacher utilized the teleprompter, green screen, titles and image vApps.

http://www.touchcast.com/ greenwood/ flipped_school_board_presentation ?ref=greenwood&p=channel



SCHOOL COMMUNICATIONS /

DAILY NEWSCAST AT THE SCHOOL

In this newscast example, high school students discuss a massive snowstorm that occurred in Quebec, Canada. The newscast replicates a report from the "ground" by using a green screen effect, a costume and a fan. The students also include an "expert" video with photos, which explain show snowstorms occur. http://www.touchcast.com/acdc/acdc newscast final



HIGH SCHOOL DAILY NEWS

In this example, two high school students exercise digital media production through a daily newscast to their school. They use image vApps to announce school events, upcoming performances, and club news. They interview a guest to announce a school fundraising effort. They use the TouchCast video background (by using a green screen), teleprompter, sound effects, photo vApps and titles.

http://touchcast.com/vianneystl/vianney_daily_news



For MORE EXAMPLES, CHECK OUT: TOUCHCAST 'SCHOOL NEWSCASTS CHANNEL'



TouchCast offers a broad range of usage scenarios. Children have access to immediate information and a variety of resources to create rich TouchCasts for learning tasks. Students can use different modalities of broadcasting for self-expression: they can work in groups or by themselves; they can role-play, utilizing the green screen in a lecture, debate, interview, documentary, or other broadcast format.

Children can easily communicate via TouchCast with their peers or teachers by sharing their own TouchCasts, commenting on one another's posts, and peer reviewing the Touchcasts.

Students experience meaningful learning when they create TouchCasts and review them, allowing them to more effectively self-assess their work and improve upon it.

The benefits of TouchCast for students include:

- Embodied Learning Experiences: Students are on camera, meaning they can't fake their absorption of the class material. They are actively processing the content through pre-production and their subsequent broadcast. This active process creates meaningful learning experiences.
- Collaboration: Small groups can work together on their TouchCasts, facilitating collaboration skill-growth.
- Digital Literacy Skills: Students learn how to efficiently filter and absorb online resources and use this content to support references.
- Critical Thinking Skills: Lesson plans built around TouchCast utilize video creation as a catalyst for building arguments and deeper class discussion.

Becoming Better Storytellers: Students hone their ability to communicate information effectively because video scales better than standard classroom mechanisms.

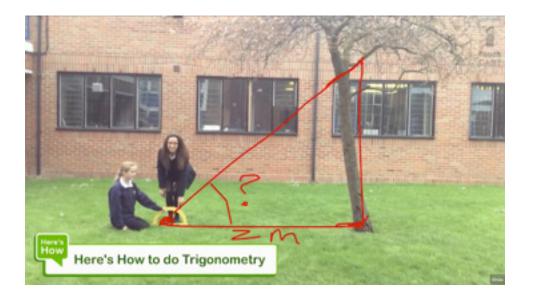
- Self-expression: Children are comfortable using digital tools for expressing themselves; TouchCast embraces this habit and turns it into a learning environment.
- Engagement: TouchCast speaks the language of children and motivates them to learn a topic through rich engagement.

students Assignments given by teachers

HOW TO DO TRIGONOMETRY

In this example, a group of students explain how to do trigonometry. They use the glass board and the white board drawing tool to draw the triangle on top of the natural environment. They also use the image vApps to further explain the terminology.

http://www.touchcast.com/ de_lusignan/ heres how to do trigonometry



SCIENCE /

PUNNETT SQUARE - GENETICS

In this example, a group of students explain their Punnett Square assignment, deconstructing celebrities' traits and predicting the offspring. They use vApps for the celebrity images and the Punnett Square. They also use the green screen.

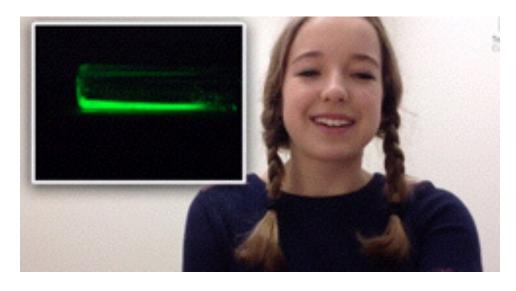
http://www.touchcast.com/flipsci
offspring_traits



RADIOACTIVITY - ELEMENTS

In this example, two students present the concept of radioactivity by examining three elements: Radium, Uranium and Radon. They use vApps to present images of the elements, the periodic table, and other interesting facts that they loaded as a script into the teleprompter feature.

http://www.touchcast.com/
chem talks/Radioactive-2



For MORE EXAMPLES CHECK OUT: TOUCHCAST 'STEM CHANNEL'

HISTORY /

COMPARING THE RED SCARE TO THE SALEM WITCH TRIAL

In this example, two students present the history of the Salem witch trial in 1692 as compared to the Red Scare, the hunt for communists led by Joseph McCarthy. They effectively use many images and web pages to discuss the topic.

See more examples from the same classroom below.

http://www.touchcast.com/

phresher/Salem-Witch-Trials-Comparison



MYTH OF THE FOUNDING OF ROME

The myth of the founding of Rome is performed by high school students who are using TouchCast's green screen effect, presenting historic facts, and reading a poem by Rudyard Kipling.

http://www.touchcast.com/stlnn/founding_of_rome_part_2/?ref=stlnn&p=channel



For MORE EXAMPLES, CHECK OUT: TOUCHCAST 'SOCIAL STUDIES CHANNEL'

ENGLISH /

THE GREAT GATSBY

In this example, a student presents a book report about *The Great Gatsby* and its relationship to bootlegging. He incorporates photos and music to support his effective delivery of the facts.

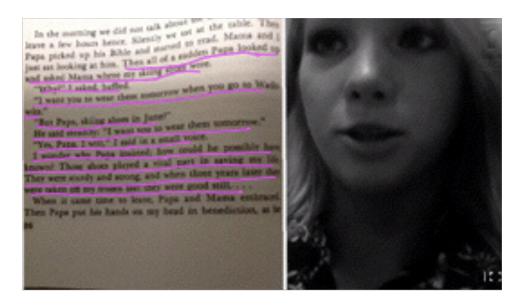
http://www.touchcast.com/56789/ Todays-TopicHow-the-Great-Gatsby-Relates-to-the-1920s-Copy-1



SYMBOLISM

In this example, a few students present the concept of symbolism and provide examples from different books to support their explanation. They make good use of the drawing tool to point out elements in the texts.

http://www.touchcast.com/kr_ela/
Symbolism



For MORE EXAMPLES, CHECK OUT: TOUCHCAST 'ENGLISH ARTS CHANNEL'

ROLE-PLAYING /

NOAH'S ARC

In this example, students perform the story of Noah's arc. They are using the green screen feature in a creative way, dressing up as the characters and collaborating as a team. Note how much fun they are having in the process.

http://www.touchcast.com/caitlyn1/Noahs-Ark



OUR AMERICAN DREAM

In this example, an entire class presents their own American Dream speeches using the virtual Lincoln Memorial Podium theme. This theme can be used for MartinLuther King day, an election, or for President's Day curriculum. http://www.touchcast.com/fetu_tv/my_american_dream/?ref=search&q=American%20dream



HIGHER EDUCATION /

COLUMBIA UNIVERSITY, TEACHERS COLLEGE, COGNITIVE PSYCHOLOGY IN FDUCATION PROGRAM

The TouchCast team collaborated with Dr. Susan Jang to create a workshop on the topic of News in the Digital World as a part of the Psychology of Media graduate course.

Follow this link for students' presentations.

http://www.touchcast.com/
tc newscast/

psychology_of_media_group_2

We are excited to continue the collaboration next semester as well.



UNIVERSITY OF PENNSYLVANIA, EDUCATION SCHOOL, EDUCATIONAL LEADERSHIP PROGRAM

TouchCast was invited to participate in the Educational Leadership EdCamp at University of Pennsylvania and to demonstrate to leaders how to use TouchCast for learning and communicating in schools. Follow this link for an interview with Joe Mazza. http://www.touchcast.com/

educasts/penn_gse_edcamp/? ref=search&q=penn%20gse

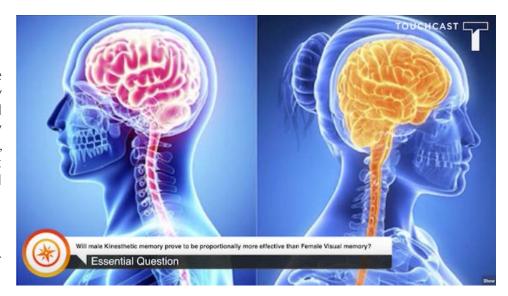


HIGHER EDUCATION /

KINESTHETIC AND VISUAL MEMORY RESEARCH

In this example, students present their research about male and female kinesthetic and visual memory. They present the supporting materials and the actual tests they conducted by using the PDF vApp, photo vApp, and video vApp. They highlight their findings with the whiteboard drawing tool.

http://www.touchcast.com/ statistics/ male_memory_performance_versus_ female_memory_performance



CRONKITE SCHOOL OF JOURNALISM AND MASS COMMUNICATION

A student at the Cronkite School of Journalism reports on high risk for forest fires in Arizona during the summer of 2015, and the preparations that are made in response. The reporter includes different vApp resources for viewers who are interested in learning more about those preparations.

http://touchcast.com/cronkitenews/wildfire_season_update/ref=trending



HIGHER EDUCATION /

BBC ABOUT CARBON

BBC engages students with expert Professor lain Stewart in this Bitesize Masterclass made with TouchCast. He explains the earth's carbon cycle and takes viewers on a journey to watch volcanoes exploding from a very short distance!

http://www.bbc.co.uk/taster/projects/bitesize-geography



LONDON BUSINESS SCHOOL

This is a presentation of a candidate who is applying to the role of the Director of Marketing and Business planning in London Business School. He uses TouchCast affordances and includes interactive web pages in his video to convey his ideas and intentions for this role.

http://www.touchcast.com/
sharp_image/
lbs_presentation_dec_3



For MORE EXAMPLES, CHECK OUT: TOUCHCAST 'HIGHER EDUCATION'



There are many ways to maximize the potential of Touchcast when setting up a classroom format. The logistics used when deploying a Touchcast Classroom are important for the success of utilizing the platform. Using equipment like a tripod, an iPad mount holder, a green screen and a microphone improves the production quality tremendously. However, it is not necessary for each student to have an iPad or any other accessories.

The following section will show several examples of how educators across the country have used TouchCast in their classrooms. These examples can serve aspiring Touchcast teachers as creative inspiration to be molded to each teacher's lesson plan and equipment access.

Introducing students to Touchcast has the potential to turn any classroom into a studio where young learners travel through time, traverse across space, imagine the impossible and learn by "doing." Here is a link to a list of suggested equipment. http://www.touchcast.com/accessories/

TOUCHCAST STUDIO /



CREATING THE TOUCHCAST STUDIO

A central area that functions as a virtual set via green screen, allowing the students to travel through space and time

EQUIPMENT /

each kit includes:

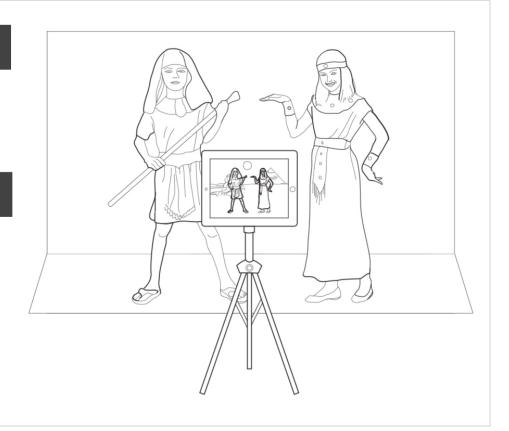
green screen

lights

sound equipment

tripod for iPads

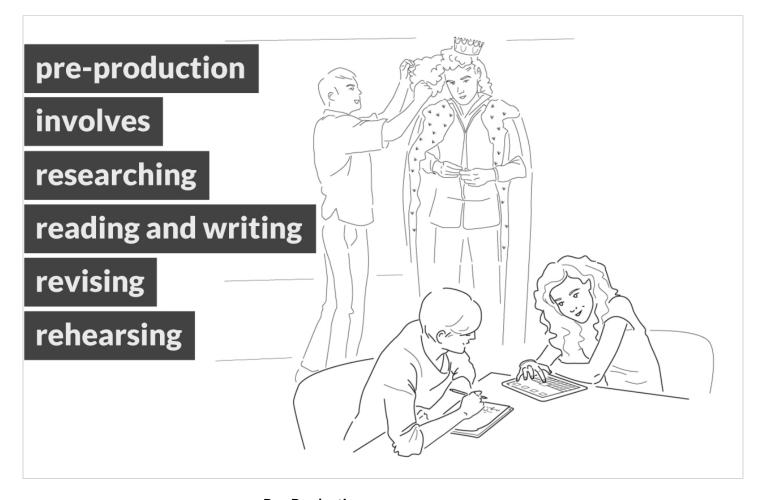
costume box



The TouchCast Kit

- A Tripod, iPad and microphone
- Green screen Selection of backgrounds for themes. It is very easy to establish a green screen in TouchCast. In fact, it doesn't even need to be a green surface.
- Costume box Selection of costumes for role playing. Even simple costumes help students getinto character for more effective learning.

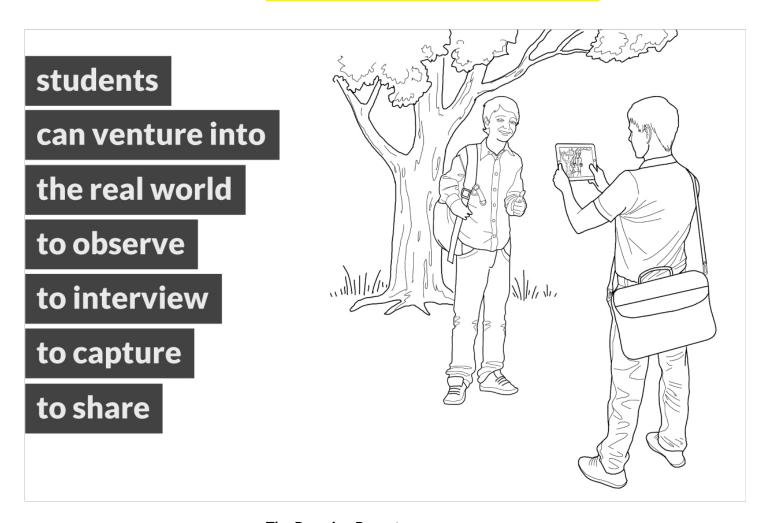
TOUCHCAST GROUP SESSIONS /



Pre-Production

One iPad per group (2-6 children) Roles in a group might be: director, actors, lighting, makeup, wardrobe, sound, scriptwriters, editors.

TOUCHCAST ROAMING SESSIONS /



The Roaming Reporter

One iPad per group (2-6 children) Individuals students, taking iPads outside classroom to create TouchCasts

TOUCHCAST HOMEWORK SESSIONS /



TouchCast at Home

One iPad per student Taking iPads outside classroom to create TouchCasts at home

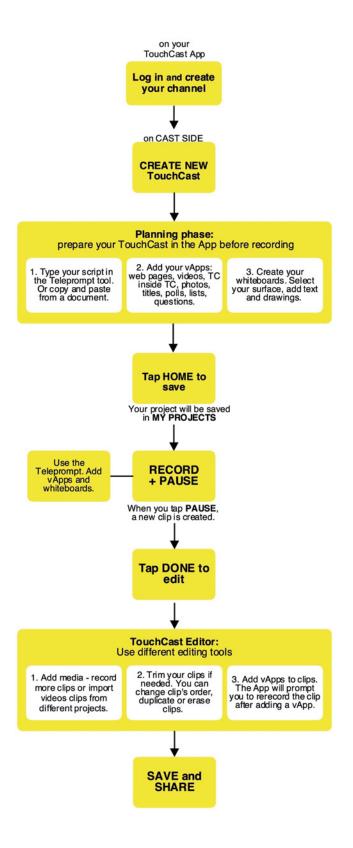


TouchCast is a user-friendly application, and after just a few minutes with the app, you will be able to create a TouchCast. To support your training, the teacher's tutorial offers a step-by-step walkthrough of the TouchCast application.

If you need more information, you can also view the tutorials on our website that are linked next to each feature for more detail. We also offer teacher's training in schools and online webinars both for teachers and students. You can contact us directly to schedule a training session at edu@TouchCast.com.

Are you ready to make a buchCast?

STEP BY STEP WALKTHROUGH /



HOW TO USE A TELEPROMPTER /



TELEPROMPTER

User can add scripts by tapping the edit button and typing-in the text, or user can copy and paste text from another document. The speed of the scroll is adjustable.

HOW TO USE A TELEPROMPTER /



TELEPROMPTER

Watch TouchCast Tutorial for Teleprompter http://www.touchcast.com/tc_tutorials/ teleprompter_tc_tutorial/? ref=tc_tutorials&p=channel

TEACHER TUTORIALS / HOW TO USE VAPPS /



VAPP MAIN PAGE

vApps are video apps that can be added to your TouchCast. We call them vApps because they are interactive elements that live inside the video. The viewer can interact with the vApps at any point while watching the TouchCast.

When you create your TouchCast, you can easily add various vApps from the vApps main page. There are many types of vApps, ranging from a web page vApp to images, poll, video, questions, Facebook, Twitter, quotes and many more. You may add as many vApps as you wish to a given TouchCast. You can also import Vapps from a different project.

THE BROWSER VAPP /



HOW TO USE A BROWSER VAPP

This vApp allows the user to browse the web and add a web page to their TouchCast.

Watch TouchCast Tutorial for Web page

http://www.touchcast.com/ tc_tutorials/the_web_vapp/? ref=tc_tutorials&p=channel

THE POLL VAPP /



POLL VAPP

You can add a poll vApp to your TouchCast, posting a question with a set of possible answers for your users to vote on.

Users will interact with the poll to vote and then receive the total votes as a bar graph.

THE QUESTION VAPP /



QUESTION VAPP

You can add a question vApp to your TouchCast, posting a question with a set of possible answers for your users to answer.

Users will receive a "correct or incorrect" feedback as soon as they tap their choice.

THE LIST VAPP /



LIST VAPP

You can add a list vApp to your TouchCast, for listing a number of items that you would like the users to refer to.

HOW TO ORGANIZE VAPPS /



ORGANIZE VAPPS

Before users start recording their TouchCast, they can organize their vApps on the screen; determine the size of vApp, as well as the location and the order of which it will appear in the TouchCast. This pre-recording planning is very helpful for controlling the quality of the TouchCast.

HOW TO USE THE WHITEBOARD /



WHITEBOARD

Users can choose to use one of the four surfaces of the Whiteboard: the Blackboard, the Whiteboard, the Glass (transparent board or the Crosslined. They can use several boards within a TouchCast and switch between the boards. They can use the text tool to type text on the boards and the drawing tool to mark and draw on the boards.

HOW TO USE THE WHITEBOARD /



WHITEBOARD

Watch the TouchCast Tutorial for Whiteboard at

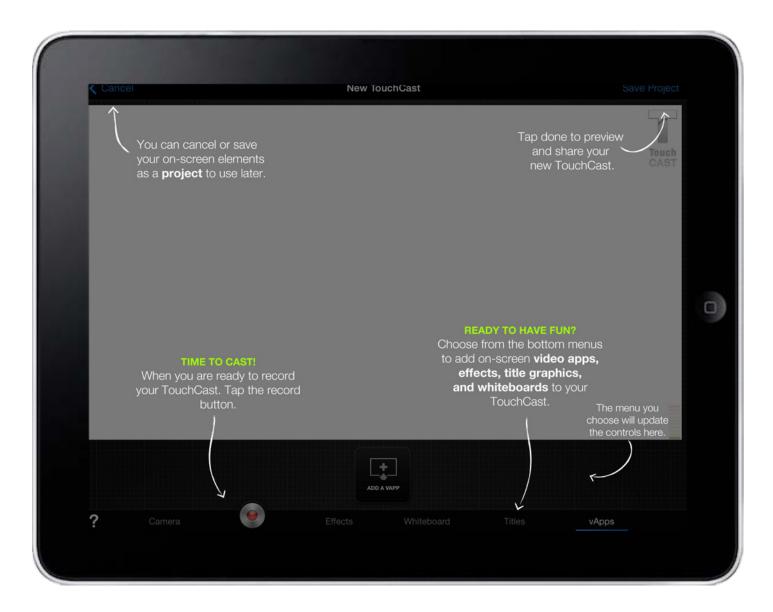
http://www.touchcast.com/

tc_tutorials/

tc_tutorials_whiteboard/?

ref=search&q=whiteboard

HOW TO USE THE CAMERA /



RECORD YOUR TOUCHCAST

In order to record the video, users should tap the record button. Record the TouchCast in small segments, or use the pause button for better control of the filming.

Watch the TouchCast Tutorial for Camera at:

http://www.touchcast.com/ TC_Tutorials/Camera---Mic-Buttons

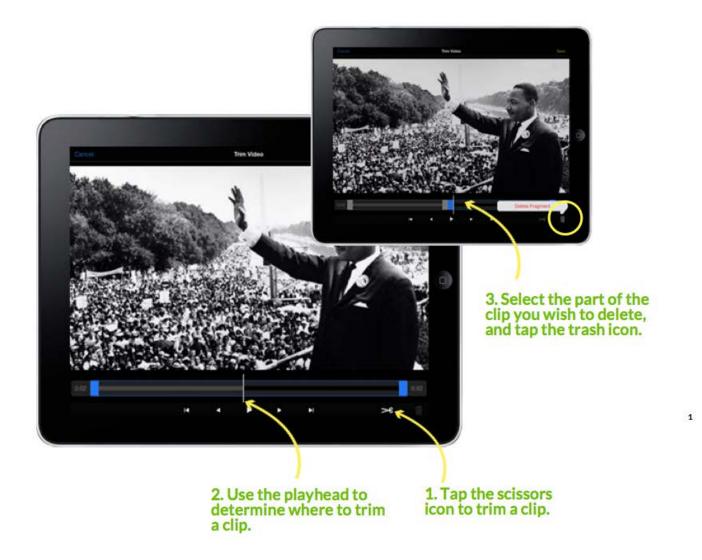
TEACHER TUTORIALS / HOW TO USE EDITOR /



TOUCHCAST EDITOR

Clips can be manipulated. Users can delete, copy and duplicate clips. They can also change the order, add vApps to clips and add transitions between clips.

HOW TO EDIT CLIPS /



TRIM A CLIP

Users can edit a clip by trimming the clip ends, or by deleting selected parts of it.

http://www.touchcast.com/

tc tutorials/

how_to_trim_and_cut_your_video_cli

ps in the editor/?

ref=tc tutorials&p=channel

HOW TO ADD MORE FOOTAGE /



ADD MORE FOOTAGE

Users can add more video clips in the editing stage. They can go back to the TouchCast studio to record more; import a video, or add a clipfrom a different project.

TEACHER TUTORIALS / MERGE TOUCHCASTS /



MEREGE TOUCHCASTS

You can merge a few TouchCasts together as long as the total TouchCast is less than five minutes.

Watch the TouchCast Tutorial for Merging TouchCasts http://www.touchcast.com/
TC Tutorials/Combining-TouchCasts-

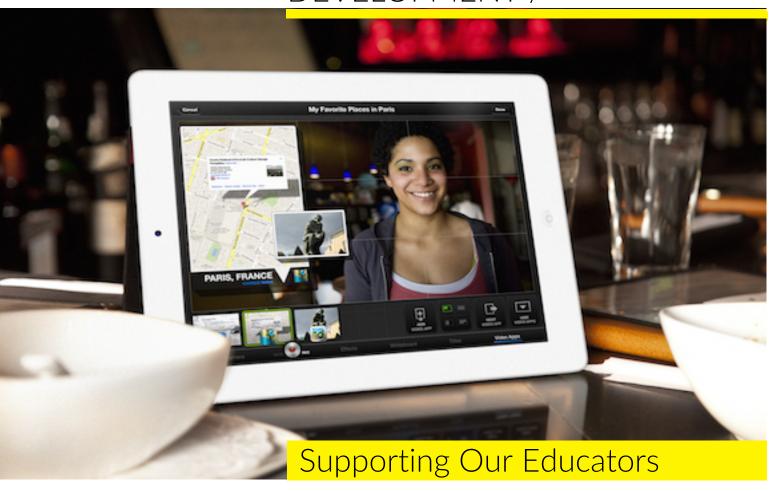
SHARE A PROJECT /



SHARE A PROJECT

A project is a collection of the resources you created for your TouchCast; such as Titles, vApps and Boards. You can share a project with your students or other teachers and they can then use your resources to record their own new TouchCasts. On the CAST SIDE menu bar, go to "My projects" tab. Tap the project to share, then tap the edit button (a pencil icon at the bottom left). Your project will be uploaded. Once the uploading is finished, you will receive a four letters code that you can share.

TEACHER'S PROFESSIONAL DEVELOPMENT /



Our education team works closely with the the educator community on different professional development objectives. We aspire to support new users, inspire educators and promote our super users. To support and inspire, we offer demonstrations in schools, as well as teacher and student workshops. We have been collaborating with educators, to develop lesson plans and created pilot studies to document parts of the process. We keep on producing TouchCasts with specificcontent for teachers, that we post on our EduCasts channel, http://www.touchcast.com/educasts/ and in the Ambassador channel, http://www.touchcast.com/tca2015/. You can check those links to get inspired. To promote our super users, we launched in 2015 an ambassador program. We designed this program to be a collaboration that fosters ideas and experiments in learning with technology, and content for education. We are committed to keep on nurturing our educators/students community in many new ways.

TEACHER'S PROFESSIONAL DEVELOPMENT /

AMBASSADOR PROGRAM /

AMBASSADOR PROGRAM 2016

We selected 28 of our super-users to work with us on special projects and help us to spread the word about TouchCast. We support each other on different initiatives like co-presenting in conferences, writing lesson plans and creating TC videos to share our mutual experience with the Working with community. our ambassadors has been such a treat. http://www.touchcast.com/ ambassadors/2016 touchcast ambass ador announcement

To learn more about our 2016 ambassadors, see the 'AMBASSADOR CHANNEL'.



To learn more aboutour 2016 ambassadors, see the <u>'AMBASSADOR CHANNEL'</u>.

DEMONSTRATIONS IN SCHOOLS/

TEACHER TRAINING IN SCHOOLS

We have visited schools in NJ and NY to support teachers professional development. We also have been providing webinars and online teacher trainings for numerous schools to help both educators and their students to learn how to implement TouchCast for meaningful learning.

http://www.touchcast.com/educasts/ teachers_training_westfield_nj/ ref=search&q=Teachers%20training% 20westf



TEACHER'S PROFESSIONAL DEVELOPMENT / PILOT STUDIES /

We conducted three pilot studies in two middle schools and one high school to explore how teachers and students have been using TouchCast for comprehensive curriculum across grades and domains. We collaborated with three inspiring educators to create an engaging lesson plans with TouchCast, which is aligned with the Common Core Standards. Teachers created 3-6 week long curriculum programs that covered specific topic from beginning to end. Check out these examples below.

PROJECT Z - INTRODUCTION TO GENETICS

Brian Jones, a science teacher for 7th grade, created a six week curriculum about the introduction to Genetics. Both the teacher and the students created touchcasts as a part of this active learning process; Mr. Jones created a few flipped classroom touchcasts to introduce the subject to the students. The students were assigned three Touchcast presentation projects, such as analyzing the traits of two celebrities and then predicting what their offspring would look.

http://www.touchcast.com/ educasts/mr_jones_educast_pioneer



CHARACTERS IN SHAKESPEARE'S JULIUS CAESAR

Beth Crawford, an English teacher for 10th grade, developed a four week curriculum regarding Julius Caesar, where she engaged students with flipped classroom touchcasts questioning the viability of teaching Julius Caesar today and comparing it with popular culture examples. Her students re-enacted modern scenes from the play, using the screen capabilities of green TouchCast. You can see the introduction in this example.

http://www.touchcast.com/kr_ela/julius_caesar



TEACHER'S PROFESSIONAL DEVELOPMENT / LESSON PLANS /

Touchcast collaborates with inspiring teachers to create a lesson plan pool using TouchCast in the classroom for active learning. We invite you to explore these seven lesson plans that are aligned with the Common Core Standards and to submit your own lesson plan to share with other educators. http://www.touchcast.com/lessonPlan/

(click here)



(click here)



English - 10th Grade - Julius Caesar Ms. Beth Crawford

(click here)



English - 12th Grade - Hamlet Ms. Rebecca Mcgrath

(click here)



History - 8th Grade - The Civil War

(click here)



History - 8th Grade - The declaration of Independence

(click here)



Social Studies - 8 Grade - Dr. Martir Luther King Jr.

(click here)



Math - 7th Grade - Add and Subtract Rational Numbers

TEACHER'S PROFESSIONAL DEVELOPMENT /

CONFERENCES, EDCAMPS & WORKSHOPS /

We take such joy in meeting our educators and students in conferences, workshops and edcamps . With the help of our 2015 Ambassadors, and other devoted users, we are spreading the word and introducing TouchCast and its many potential uses for learning purposes.































































AWARDS AND NOMINATIONS

TOUCHCAST AWARDS & RECOGNITION /

2015 Best Website for Teaching & Learning American Association of School Librarians (AASL) http://www.ala.org/aasl/standards-guidelines/ best-websites

2015 Best Platform Innovation, Nominee (for Story of Now) Broadcast Digital Awards April 2015 http://www.broadcastdigitalawards.co.uk/shortlist

2015 Best Website Design (for Story of Now) The Drum Design Awards April 23rd, 2015 http://www.thedrumdesignawards.com/results/55

2015 Winner - Start-Up Accelerator Newspaper Association of America March 17th. 2015 http://www.naa.org/mediaXchange/Accelerator-Pitch.aspx

2014 Finalist, Media Category, GREAT Tech Awards Competition UK Ministry of Trade and Industry Sept. 22nd, 2014 http://www.prnewswire.com/news-releases/ british-foreign-secretary-announces-finalists-for great-tech-awards-competition-276209531.html

2014 Kids Guide to Creativity - Editor's Pick Common Sense Media July 8, 2014 https://www.commonsensemedia.org/guide/ digital-creativity-guide#Age-13-17-2778346

2014 Summer Learning Guide - Editor's Pick Common Sense Media June 18, 2014 https://www.commonsensemedia.org/ guide/summer-learning-guide

Gartner Cool Vendor in Media, 2014 Gartner May 6, 2014 https://www.gartner.com/doc/2730619

2014 Best Use of Mobile Video. Nominee The International Academy of Digital Arts and Sciences (aka "Webby" Awards) April 2014 http://pv.webbvawards.com/2014/mobileapps/all-devices/best-use-of-mobile-video

App Store Best of 2013 Apple Dec 17, 2013 AppStore.com/BestOf2013

VideoInk, Top 5 Breakthrough Video Technologies of 2013 Dec 26,2013 http://www.thevideoink.com/features/specialissue-tag/top-five-breakthrough-video-technologies of-2013/#VVIfT2B77yh

BEST PRACTICES BY EDUCATORS

Project Z - how my students grades learning with Touch Cast By: Brian Jones

ABOUT BRAIN



Brian Jones holds an MA in Education Administration from California State University, Long Beach and currently teaches 7th grade science in Norwalk, California. Brian is one of the co-creators of GlobalCOlab (GCL), an online learning portal where students from around the world address world and community issues through collaborative scientific and engineering projects. In addition to teaching, Brian has presented at SXSWedu, ISTE, and CUE. Brian is an Edcamp founder, flipped learning consultant, and technology integration trainer. Over the past seven years, Brian has been on the forefront of the flipped classroom model. His classroom is used to mentor acceptance and growth in flipped and gamified strategies, and has been filmed by KLCS, PBS Los Angeles.

INTODUCTION

Breaking against traditional teaching practices can be an extremely lonesome process, as was definitely the case for me. I cannot tell you how many times I heard gossip as I integrated zombies into my science curriculum. At one science meeting two of my colleagues and I were told by the school science lead that we were not teaching, we were being lazy, and that people laughed at us. These flurry of accusations hurt, but I knew that my students were learning. I had authentic learning to show through science notebooks and student work, but it did not matter.

Some educators have their minds set as to what education is and will try to tear you, and competing ideas down in the process. If I had listened to what had been said to me, I would not have become the effective teacher with the educational insights that I have today. It is a tough and lonely road, but you must initiate the first steps to start. It will be tough and painful but luckily you will meet some amazing individuals and educators along the way.

When I started Project Z, a company called TouchCast was also getting their start. TouchCast is this amazing app that allows for educators and students to create interactive videos via video apps, known as Vapps. It was through TouchCast that I met Dr. Ayelet Segal, Head of TouchCast Education. Dr. Segal approached me about writing a lesson plan and enacting it for TouchCast to feature in Engaging with the YouTube Generation and on their website.

During the first Skype session, I sheepishly brought up Project Z, and zombies for genetic traits. To my surprise, Dr. Segal loved the idea; she not only wanted to expand on it, but also had TouchCast sponsor my classroom with a new green screen, lights, and props such as mustaches for my students. Taking that first step and being myself was the key. I also cannot express though, the amount of gratitude I have for fellow journeyers like Dr. Segal, Liz Meredith, Sarenawati Jafaar, Anders Enström, and the many more I have come across in my own search for education. Take such people into your life, learn from them, and allow them to reenergize you for the road ahead.

USE YOUR EXPERIENCES TO FIND YOUR STYLE

"Videogames will rot your brain," I cannot say how often I have heard this statement. I have been an avid gamer since I was seven years old. I still remember that first Christmas, I opened the present my parents carefully wrapped me with a finesse of a cat shredding paper to reveal an original Nintendo Game Boy. I do not remember the rest of that glorious morning except for how my father recalls that moment to family or friends, "Brian just stood up, and walked away staring at that screen leaving all his other presents unopened." Over the next few years I solved puzzles of Tetris, mazes with Mario, lived through the harrowing adventures of Link in the Legend of Zelda.

I was an overactive child with a brain that was over stimulated by the outside world with no real way to outwardly affect the outcomes of reality. This concept was reinforced as a child growing up in America through the constant reiteration of, "You're just a kid." Videogames allowed an escape. I not only was able to effect the digital world through my digital interactions within the world, but I was also able to solve complex problems, save that video game world, and, as a child, I felt as though I was making a difference by solving the game and the eight bit characters' complex digital problems.

Through videogames I was enacting what John Dewey wrote about in 1916, that education should be taught as a social function. Dewey added that a truly connected person cannot make decisions without taking the activities of others within his or her community into effect (Dewey, 2009). Videogames allow a child's mind to connect to a digital community in a representative environment that can simulate infinite possibilities both positive and negative.

Many people have told me this is negative in that the social interactions are not real, but for a child, the digital world is as real as the physical around us. Harry J. Brown in his book *Videogames and Education* supports my life observations of videogames and their effect on learning. Brown states that videogames allow for more effective learning than the traditional skill-and-drill of traditional school. Games teach us to learn at our own pace, accelerating a learner cognitive development inside of a digital world with limitless possibilities (Brown, 2015). John Dewey's writing supports this idea as, "Formal instruction, on the contrary, easily becomes remote and dead—abstract and bookish, to use the ordinary words of depreciation" (Dewey, 2009).

So when I found TouchCast, I was hooked. Not only could I watch videos, I could also interact within them. Viewers of my TouchCasts could then interact in live time with the same world I had created for them through Vapps. It was magical to me, and I had to share this interactive digital space with my students by creating a TouchCast gamified classroom.

GAMEFIED LEARNING, PLAY IS A NATURAL WAY OF LEARNING

Gamified learning has been around since children began to play. When a child goes outside with his or her friends, they set up an objective to the game, and while they play this game, both societal and social norms are learnt. the idea of play is so important that a clinical report in the American Academy of Pediatricians stated play as being "essential to the social, emotional, cognitive, and physical well-being of children beginning in early childhood. It is a natural tool for children to develop resiliency as they learn to cooperate, overcome challenges, and negotiate with others" (Milteer et al, 2012). If play is essential to the core development of a child, then why does this idea feel so revolutionary within the walls of a classroom?

In October of 2010, Sir Ken Robinson gave a TED Talk entitled, "Changing Education Paradigms" (https://www.ted.com/talks/ken_robinson_changing_education_paradigms). During his talk, Sir Robinson describes how the current designs of westernized school systems were developed to represent factories during the Industrial Revolution. Today many in education refer to this model as the Industrial Model of education. Sir Robinson goes on to explain that when the main industry within a country is manufacturing, factories need factory workers.

Within these factories, the job of a factory worker can be mundane; here's the job, here's the spot within the assembly line, and repeat this job ad nauseam. Creativity and play is not an ideal characteristic for this type of work, so schools had to teach it. This concept was modeled by the majority of classrooms having desks in rows with students completing the similar rote tasks in a linear fashion, waiting for the next bell to tell them where to go.

Students who do not fit into the box are sent to the principal's office, much like an uncompliant employee sent to the foreman. Systems are learnt, students are grouped by age and pushed through the school assembly line, and they graduate. Sir Robinson's conclusion is that this system was useful one hundred years ago but today's economy and society is one of creativity and flexibility, and the Industrialized Model is as John Dewey put it, "remote and dead" (Dewey, 2009).

GAMIFICATION. PLAY EMULATING LIFE

Gamification is the process of making the classroom curriculum into a game. The key of successfully gamifying a classroom is to make the game about your personal loves and passions. I tried to accomplish a gamified classroom based on other educators' models, but I never felt like it represented my ideologies and therefore did not succeed with me. I firmly believe that the one thing you must do to reach your students is to be true to yourself and your style; not to say that I do not constantly research what other educators are attempting inside their own versions of a gamified classroom. One of my favorite examples is The World Peace Game developed by John Hunter for his fourth grade students some 30 years ago (https://www.youtube.com/watch?v=0_ihrNohVGs).

Within The World Peace Game, the centerpiece is a four storied Plexiglas representation of the planet. Students are divided into nations, gods/goddesses who control the weather, stock brokers, etc... and are then put through fifty different simulated world crises to teach them about life, politics, and the love of learning through play. In his *book, World Peace and Other 4th-Grade Achievements,* Hunter states the main goal of gamification, which is hard for any educator to accept: Education must allow a student to fail at a task as much as succeed. And he determined that play allows students to fail in a safe atmosphere and teaches the resiliency to try again (Hunter, 2014).

This stress of "failure" also permeates educators, according to Dr. Molly Fisher, in her study *Factors Influencing Stress, Burnout, and Retention of Secondary Teachers,* one third to half of new teachers find a career outside of education within the first five years (2011). In a time of high stakes testing, No Child Left Behind, pacing charts, and "teacher accountability," shouldn't a teacher fall in line, follow the charts, curriculum, and use the Industrialized Model to maximize learning? The answer to this is simply, no. In fact the opposite has shown me the best results in regards to learning. Remember, young children naturally develop the tool of play. Play is one of the strongest tools a teacher can use to foster learning and growth in not only the students, but also one's own self.

People learn through trial and error; becoming frustrated and then finding the will to push through and find the necessary solution. Gamification applies all of this by placing the teacher within the arena of play, just as John Hunter found, I discovered that play enables an educator to emulate life inside of the classroom where mistakes can be fun, and "failure" is not a word.

MAKING GAMIFIED MY OWN: PROJECT Z

Project Z was the model I created within my classroom in 2013. Zombies may seem far-fetched to the area of science, but many notable organizations such the Centers for Disease Control (CDC) use zombie outbreaks to teach about disease control and outbreak prevention (http://www.cdc.gov/phpr/zombies.htm). I was not the first to use zombies, or a zombie curriculum within my classroom, but I made it my own.

Remember my story in the introduction of people telling me, "Videogames will rot your brain?" Could that saying be any more zombie if it tried? To me, brain rotting and zombies go hand in hand. I had learned this through my many years of playing videogames like Resident Evil. It took the strength of me as an educator to say, "Why not use my extensive knowledge of zombies for good and apply it to my style for teaching?" I began by creating an introduction to Project Z introducing the outbreak and having a cartoon president challenge the students from the White House. (http://flippedscience.weebly.com/project-z-intro.html).

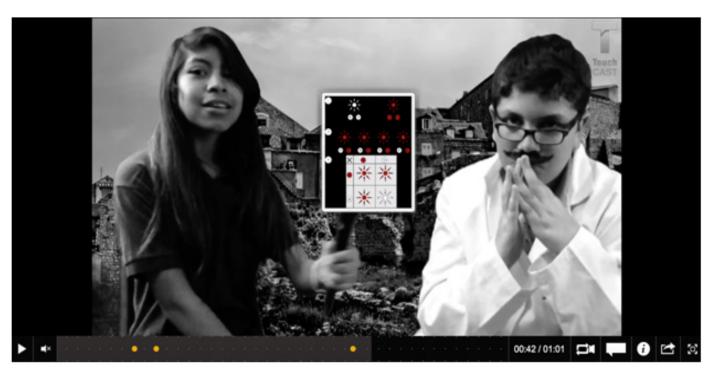
Within the video you hear and see "Zombies" along with references to pop-culture books, movies, and videogames that student are currently excited about. The video then goes into the history of a bite that changed the world; the world scientists and doctors could not find a cure so the president of the United States is allocating all resources to educating students into helping find the cure. The scene is set. Establishing the scene is everything to a videogame. If a gamer does not buy into the initial scenario, the whole game is lost. The game ends up in the trash, or is returned for another game at the store. The same goes for students sitting in a class. The initial video must be engaging, set up a problem, and describe the simulated reality of the digital space or the player's brain will reject that digital reality. The video needs to also be all encompassing and allow for multiple pathways to solving problem.

Instead of project based learning, it is problem-based learning using projects. After the initial world is set up, students were posed problem based scenarios consisting of issues the city council had for them. Within this page you can see three such examples: http://flippedscience.weebly.com/project-z-unit-1-simple-machines.html. An example of a problem based scenario was a city council issue where a tree fell into the parameter's fence. The city council asks the students to create a simple machine and calculate the workload needed to life the tree out of the way to repair the fence. Students had to then create a Google Presentation to present to the city council, which was a council composed of students, and receive their up or down vote to continue on. (http://flippedscience.weebly.com/scenario-1-city-council-presentations.html).

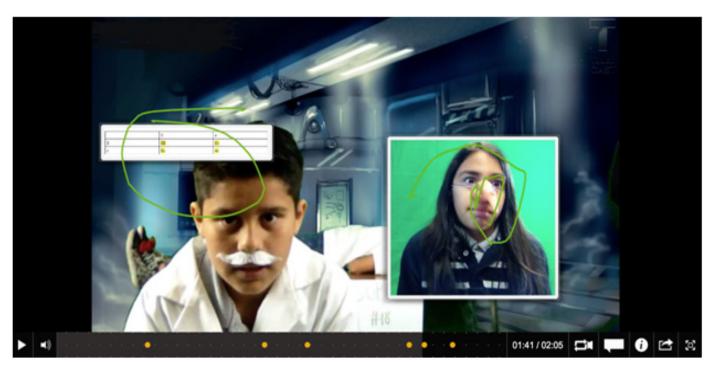
There are some main things to keep in mind. First, there are more solutions to the problem than even the teacher knows. Back away from jumping in to assist and tell the students the answer, or instantly rejecting an answer by the student, even if you know their proposal will not work. Second, allow the students to make mistakes. I banned the word failure from my classroom. Mistakes are good as long as you learn from them. Allow the students to learn from their mistakes. Third, become active participants alongside the students. I have also banned the word teacher from my classroom. Teacher, to me, represents the Industrial Model of education where an adult stands in front of the classroom dictating what a student needs to learn. My good friend and fellow educator, Tommy Hoang, coined the phrase "Education Engineer," because we are the engineers of each student's educational experience, just as the Imagineers are engineering the Disney experience. Again, this is me, and my style. Adopt some ideas just as I have from others, and make it your own, become a rebel against the Industrial Model by becoming unique and being yourself.

PUNNETT SQUARES, GENETICS, AND MY LIFE LESSON FROM PROJECT Z

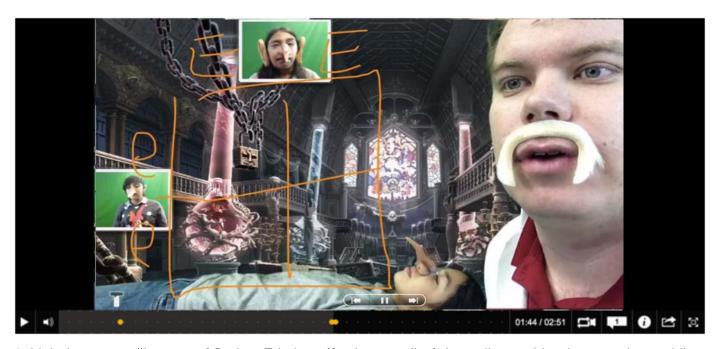
With Dr. Segal's acceptance and encouragement, I pushed myself a step further with the genetics unit covering Punnett squares. I asked myself, what if the students were the game designers and I stood back even further as my students presented their game through an interactive TouchCast? I provided scaffolded supports where necessary, but at a certain point the scaffolds must come off, and the building will either stand on its own or crumble. If it starts to crumble, assess, and add further supports where needed. Examples of student TouchCasts added to the gamification library are this one of Gregor Mendel http://www.touchcast.com/flipsci/gregor_mendel_/?ref=flipsci&p=channel



and the Zombie Traits video http://www.touchcast.com/flipsci/77c60fe72b/?ref=flipsci&p=channel.



The students then wrote, and directed a TouchCast with me http://www.touchcast.com/flipsci/93c9836759.



I think the most telling stat of Project Z being effective are all of the smiles, and laughter you hear while the students present their content. An example of a resulting TouchCast based on the genetics unit can be viewed at http://www.touchcast.com/flipsci/offspring traits.



RESULT OF GAMIFYING

The results were evident. For over 20 years the Title I school I teach at had never received first place in the Orange County Academic Pentathlon against non-Title I schools throughout the Orange County area. Through play and a gamified classroom, I learned alongside my students. We had fun, were learning about genetics and evolution, but most of all, we were all engaged with each other, the curriculum, and science itself. Sure, I heard from other teachers that I was not teaching, and I could have listened to them and returned to the Industrialized Model, but I believed in myself and the students. The results displayed what I believed: out of twelve students, seven of them medaled, sweeping the top five spots, with two students tied for second place, and two students tied for first place. The students came in first place as a Super Quiz team for science for the first time in school history, and best yet, we all had fun while accomplishing such an amazing feat. I have to attribute it all to allowing mistakes, fun, and gamification within my classroom while believing in myself as an educator.

One of the most common comments I receive from teachers visiting my room is, "Well you are just a superstar teacher, and this is not the norm. I do not even know where to start and how I can afford such a classroom." I too thought this way. There are a million different things that any educator could do, but when viewed as a whole not only do the constant issues overwhelm, but also cause stress, deter, and can burn any teacher out. What I learned after taking this path for some time is that there are others like me out there, looking to support, and looking to connect. The challenge is to pluck one idea, out of that list of million, and focus on it, nurture it, and grow the idea within your classroom so that you can share that idea among your students. The next year pluck one more idea and add it to the one before. After 10 years of teaching, I look around my room at Project Z, and what has been created by my students, as I look to choose yet another idea from the pile of million.

Since implementing Project Z within my classroom, I have chosen to grow the student use of TouchCast in my classroom. I co-founded the GlobalCOlab project (www.globcolab.com). GlobalCOlab are asynchronous collaborative labs that allow students from around the world to interact in both the science and engineering processes, then present to, and peer review other students' work from around the world. This past year Dr. Segal and TouchCast has teamed up to release GlobalCOlab version 2.0. In the new GlobalCOlab, students create interactive TouchCasts, then share through the GlobalCOlab website by embedding tags. The TouchCasts are uploaded in real time, where other students can comment on each other's work. To me this is the ultimate interactive digital space by connecting students around the world in one interactive classroom, which is the future of education.

Student-Centered Flipping with Touch Cast By: Liz Meredith

About Liz



Liz Meredith teaches 8th grade science in St. Clairsville, a small rural town in Eastern Ohio, and loves every minute of it! Liz has more than a decade of teaching experience in both urban and rural schools of all socioeconomic levels. Having spent two years as a curriculum writer for the Challenger Learning Center at Wheeling Jesuit University, Liz continues to conduct professional development programs for other teachers on educational technology. In 2015, Liz became an ambassador for TouchCast Interactive Web app, and national recognition as National Science Teacher Association (NSTA) Distinguished Teaching Award. In 2015, Liz was inducted as an Apple Distinguished Educator (ADE), and presented GlobalCOlab at the ADE Institute in Miami, Florida. Liz loves learning from other teachers, and believes her success is because of the amazing educators from her planned learning community.

It's been two years since I first started implementing TouchCast in my 8th grade science classroom, and I can't imagine my lessons without it. Whether I'm using the interactive web app as an educational tool for instruction, creation, or collaboration, it has become an integral part of my teaching that I have come to rely on heavily. Both my students and myself have discovered so many meaningful uses for learning when implementing TouchCast into our classroom. We have also entered into educational collaborations, creating life long, learning partnerships through the simple use of the TouchCast app.

Flipping with TouchCast

When I first learned about TouchCast, I was beginning to flip my class by making videos using just a video camera and some simple editing tools. I posted them to YouTube, and then included any additional resources for students, such as websites or Google docs, in the comment section. These videos were effective, and students learned from them, but they didn't encourage audience interaction with the content, and the additional resources I wanted students to utilize were often ignored.

When I realized that TouchCast vApps were exactly what I was looking for, I started using them more and more in my classroom. I liked the fact that I could include multiple types of formative assessments to evaluate student comprehension, such as using the polls vApp, or linking to a Google Form. The multitude of vApps available in TouchCast can help teachers assess comprehension, direct students to additional pertinent information, and they give teachers and students the ability to communicate and collaborate, commenting on videos for asking questions and posting feedback. The students like the fact that they are interactive, and TouchCasts keep their attention much better than my regular YouTube videos. An example of one of my TouchCasts, found at http://www.touchcast.com/stcscience/earthquakes/, shows how I assessed student knowledge using both the poll vApp and a Google form.



The term "Flipping" has gained a lot of attention in education recently, some positive and some negative. Many of the arguments against flipping state that instructional videos don't serve to deepen students knowledge of the content, leaving them with a surface understanding of the material and a lack of motivation to go any further. I believe that using TouchCasts not only deepens students understanding, but also provides the interaction necessary for students to become excited about learning! Creating interactive videos with TouchCast is now an asset to my flipped classroom that has increased student motivation and critical thinking.

One of the key pieces in creating educational videos is to make sure students interact with it in some manner. Engagement in any lesson is key, and there are multiple methods that can be utilized in a TouchCast to achieve this interaction. A few ways in which I do this are through the question vApp and the poll vApp. I place these throughout my videos and ask students to take a minute to reflect on what they just learned, and then answer the question. Students are able to see immediate feedback once they pick their answer which is invaluable to learning and greatly increases their motivation. Students also become actively engaged when interacting with the webpage vApps, and I also like to include the map vApp when referencing a particular location. Through TouchCast vApps, students explore a wealth of resources and can dive deeper allowing them to explore it from multiple perspectives.

Assessment is also a tricky piece of a flipped classroom. When students view videos or other educational resources, how can you be sure they've learned what they need to from them? I like to use polls to gather feedback and opinions, and the vApps let students see immediate feedback. I also frequently link Google Forms to collect formative assessment data by adding the webpage vApp. The great thing about TouchCast is the ability to put all these different types of assessments and resources into the video, making it easy for students to access everything through one platform. This is such a strong piece of instruction for a flipped classroom, because it covers so many important aspects for meaningful learning.

Collaborating Globally

Through using TouchCast with my students, I received subscription newsletter emails that regularly pointed me towards new features, and connected me to other educators using TouchCast in their classroom. It was through these connections that I met fellow TouchCast Ambassador Brian Jones out of Norwalk California. He was looking for other teachers to n collaborate with using TouchCast in a project called GlobalCOlab. This project involved our students researching similar science topics, exchanging ideas, designing their own scientific explorations, and peer reviewing each other's work. All of this was achieved through TouchCast, allowing our students to collaborate on major scientific issues happening right in our back yard. The many benefits my students reaped from GlobalCOlab and TouchCast was amazing!

For instance, one of the things I have struggled to teach students is the scientific process. It seems that year after year, students can memorize the steps to the scientific method but can't seem to apply it to the world around them let alone labs and experiments we do in class. Using TouchCast as a part of GlobalCOlab has changed that by greatly improving my students scientific process and analysis skills.

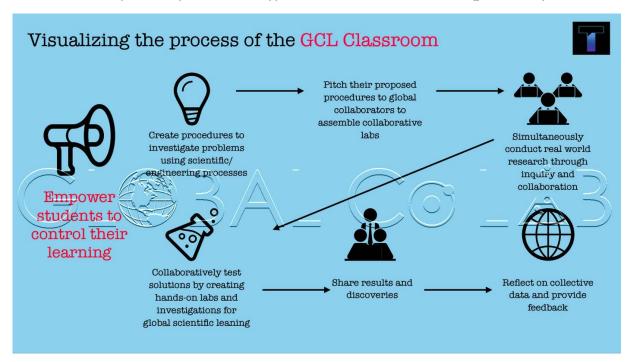
The process of GlobalCOlab involved five different steps. First, the teachers created a TouchCast explaining to students the topic they were to research, and posing possible questions to them. Our first project focused on

the theme of biodiversity and watershed health. Students investigated the concepts on their own, and began to formulate possible experiments they could conduct. Next, students recorded their ideas in TouchCasts, and posed them to their global peers for feedback. Classes were able to watch each other's TouchCasts, and using the comment feature on the app they asked each other questions, suggested possible changes, and left positive criticism. The ability to communicate across different time zones had a tremendous impact as our students became connected learners, excited to get back to school the next day to see what feedback was left for them. TouchCast help us to create an asynchronous, global classroom.

Next, after students had listened to the feedback, they decided with their groups if and how to change their experiments. Many times the feedback received from Mr. Jones's students served to enlighten my own students as they saw things from a different perspective. Since our topic was watershed health, students learned about the geographical differences that can affect aquatic life in rural and urban areas, as well as warmer or colder temperatures. This broader perspective helped students to finalize their scientific investigations.

Next, students conducted their experiments and recorded the whole process through pictures and videos. These visuals served as some of the vApps included in the group's TouchCasts. When the lab investigations were finished and results were tabulated, groups recorded themselves explaining the scientific process involved in their experiments. They were able to articulate the reasoning behind the how and why of the design of their investigation. This was something amazing to witness, as I had struggled for so many years to get kids to see the scientific method as a fluid and functioning process that is involved in all the world around us. TouchCast, through GlobalCOlab, helped my students to understand science as a part of everyday life, not just a subject in school.

Finally, after students created and posted their TouchCasts, they peer reviewed each other's work. Students watched and learn from TouchCasts created by not just other teachers around the world but also other students. This experience provided the type of true and authentic learning that every classroom should have.



After working together on the first GlobalCOlab project, the program soon spread to other teachers across the country, and then across the globe. When teachers started seeing the benefits of TouchCast, and how easy it was to implement in their classroom, more classrooms wanted to join in on the collaboration. Now, GlobalCOlab connects over 35 classrooms from multiple states and countries, allowing our students to learn and discover together the world around them. Students create TouchCasts to showcase their research and scientific process, and share feedback with each other. Through GlobalCOlab and TouchCast, students have made global friends as they connect with other learners across the world.

Students Take Control of Their Learning

In using TouchCast through the GlobalCOlab project, I expected the increase in technology and communication skills that my students would gain; but there was no way I could predict the major transitions in teaching dynamics that resulted from its use. One of the most amazing things that has occurred in my teaching because of TouchCast is the transition to a student-centered classroom.

Through video production with TouchCast, students created a record of their research, experimentation and results. They included pictures and videos of their experiment as vApps while they explained their reasoning behind it. They identified evidence of their results and then opened up the floor for others to comment and provide feedback. Peer reviewing each other's work really helped students reflect on their own learning, giving consideration to the comments and suggestions made by others and re-designing their experiments accordingly.

Since each group's investigations were guided by feedback and reflection from others, students gained control of their own learning. In this manner, the students were the ones who determined what was taught as they continued to learn new scientific principles from each other's experiments. This was a new way of not only flipping my class, but also a way of giving more control to my students. Admittedly, this took a while to adjust to as I had not planned on this new development. Ultimately, however, it ended up being one of the best educational experiences for not only my students, but also ended up making me a much more well rounded teacher.

GlobalCOlab and the TouchCasts made by other classes served not only to instruct my students on important concepts and content, but also to enhance their critical thinking skills. They gained the ability to analyze and think for themselves, questioning the scientific world around them. My classroom became an active hub of learning in which students took command of their own learning, reaching levels of understanding and engagement never before seen in my teaching career.

A Collision of Two Worlds: Video & Connected Education Theory By: Dr. Brad Gustafson



About Brad

Dr. Brad Gustafson is an elementary principal in Minnesota. An innovative administrator, Brad has pioneered efforts to transform pedagogy to reflect best practices in a digital age. Brad is a TEDx and keynote speaker and author who exudes a passion for leadership that's palpable.

Brad won the national Digital Innovation in Learning award from EdSurge and Digital Promise in 2015. He was an Academy of Education Arts and Sciences Bammy Award Finalist in the category of Elementary School Principal. His blog, Adjusting Course, was recognized with an Editor's Choice Content Award by Smartbrief Education. It was also named as a "Must-Read" K-12 blog by EdTech Magazine. The blog was recognized as a finalist for Best Administrator Blog by the EduBlog Awards the past two years.

Brad earned his Doctoral degree at Bethel University where his research focused on leading innovative professional development. Connect with him on Twitter via @GustafsonBrad.

Introduction

It would be absurd to think that we can effectively teach the YouTube generation without providing kids meaningful opportunities to publish to YouTube. If schools do not provide students safe and scaffolded experiences in creating and publishing video, students will undoubtedly seek other opportunities to share.

When students are outside of school they engage in online gaming and connect with one another using social media and video as a medium to laugh, learn, and explore their world. Sometimes the exploring that kids are doing outside of school using video and social media is less than inspiring, and other times it is blaringly inappropriate. This should not be seen as a reason to ban video in schools; instead it is a call to action for educators

Schools can no longer lock down devices or limit student potential based largely upon what we refuse to learn. The age of video is upon us and the pedagogy we implore should be congruent with the opportunities students have to connect and create outside of school. Our kids need us to embrace innovative practices that support their natural inclination to connect and create while cultivating digital skills and positive character.

Research on Technology Integration & Connected Learning

A growing research base exists that demonstrates the importance of educators engaging in digital learning and professional development. The research is current and peer reviewed, and reveals how educators are successfully moving away from antiquated and isolating practices to a connected world that includes collaboration and innovative communication. In a quantitative, non-experimental study (Melton, 2015) examining the relationship between school leaders' self-efficacy and technology behaviors, a significant positive relationship was found between a school principal's self-efficacy and the frequency in which s/he integrated technology into leadership behaviors. Instead of pondering how to find extra time to add technology, video, and digital-connectivity into our work we need integrate relevant learning and communications by leveraging existing digital tools. Those who rise to the challenge will not only meet the needs of the YouTube generation, but they will also begin honing a new leadership characteristic.

In a phenomenological study (Gustafson, 2015) involving elementary principals across the United States, a new leadership trait emerged. Those educators who were 'connected' experienced new and innovative levels of professional learning that were previously unfathomable. School leaders who are connected invest in relationships using digital tools to transform learning and bring new levels of innovation and collaboration to their schools (Gustafson, 2015). Their leadership behaviors impacted core learning processes in their schools, and the connection between professional development processes and student learning was strong.

One of the most effective ways to increase students' capacity as digital-age learners is to connect the adults in a school. Those who invest in relationships through digital means like Twitter and Voxer not only experience innovation, but they also tend to ignite it in their schools. Adult connectivity is enhanced when educators tap into the wealth of resources and conversations occurring through blogging, micro-blogging, podcasting, asynchronous collaboration, and video. When educators understand that human relationships and connections can be a catalyst for personal and professional transformation, social media can be an extremely effective platform (Sinanis, 2015).

Implementing a Pedagogy of Innovation

When we consider social media as 'learning media' we can begin to leverage digital tools to unleash student innovation and increase achievement. Video is one of the most transformative and untapped tools in education; it is the sleeping giant capable of empowering a new learning paradigm. When students and staff are given the opportunity to create using video as a core component of the learning process possibilities are unleashed. When their experiences with video include connections with other classrooms and schools that innovation goes through iterations that result in improved practice and new levels of learning that didn't previously exist prior to the connected experiences.

In a phenomenological study (Gustafson, 2015) involving elementary principals across the United States, a new leadership trait emerged. Those educators who were 'connected' experienced new and innovative levels of professional learning that were previously unfathomable. School leaders who are connected invest in relationships using digital tools to transform learning and bring new levels of innovation and collaboration to their schools (Gustafson, 2015). Their leadership behaviors impacted core learning processes in their schools, and the connection between professional development processes and student learning was strong.

Why is video such a powerful vehicle for advancing innovation? EdTech Magazine poses an answer in a story it ran about the power of YouTube and work that our students are involved in. http://www.edtechmagazine.com/k12/article/2015/05/qa-principal-speaks-out-power-youtube-can-have-schools One of the reasons video has been such a powerful force in sharing our school's story is its ability to share authentic glimpses of student learning and relationships throughout the day. Video has the capacity to combine voice, imagery, text, music, and more.

When a video is powered by an interactive app like TouchCast the constraints are removed and creativity is only limited by a user's imagination. The following examples highlight how our students and staff have experienced TouchCast as a meaningful tool to communicate, create, and learn.

Empowering Students to Share their Story

Each year I work with our 4th graders on a year-long project we call the Principal's Podcast Crew. The project has supplanted my weekly principal's newsletter, and breathed new life into school communications. Each week (approximately) we produce a video podcast to share out the work and learning occurring across our school.

After the video is shared I often hear positive feedback and enthusiastic buzzing about its contents from parents about their children's role in the production. I assure you...this NEVER happened when I wrote my traditional newsletter before!

Working with students on the project is one of my highlights each week. Pre-production work involves me meeting with a small group of students to plan the podcast. Students determine a teacher or peer to interview and take notes during the subsequent conversation. They bring their notes back to my office a couple days later and report out the learning and comments they collected. Sometimes students will add photographs or video to enhance their report.

We then spend the next 45 minutes together conducting a working lunch. We create a storyboard together and brainstorm engaging ways to start each podcast. We record the Principal's Podcast and add any special effects or photographs using the V-app tool in TouchCast. I have a chance to connect with kids on a deeper level as we laugh, practice, and publish together!

I love rotating through working with all of our 4th graders and giving teams of kids the chance to create something for an authentic audience. I also value the opportunity to model digital leadership by giving feedback and encouragement when it comes to the content and audience of our videos. Months later I maintain a special connection with students based on the teamwork and podcasting projects we collaborated on while producing the Principal's Podcast. The best part about the entire experience is that we're able to empower kids to create content rather than merely consume it. Our 'StuConnect' Podcast is a shining example of the shift from consumers to creators of learning.

Connecting Students through Video Podcasts

When students collaborate on podcasting projects along with kids across the country the impact their creative work exponentially increases. Several years ago I joined forces with two principals from the East Coast, Tony Sinanis (NY) and John Fritzky (NJ), to create a cross-state collaborative podcast. We wanted to connect students using video and TouchCast was our tool of choice. Because our schools were on different schedules and in different time zones we relied heavily upon asynchronous collaboration to get the podcast rolling.

We have produced the #StuConnect podcast by using a shared TouchCast account. Each of us shares the password and takes turns creating content with students in our schools when it's convenient for us. We challenge students to create a shared theme that leads to a more cohesive end product. After our students have filmed their parts we tap the edit button within the app to merge our individual TouchCasts together. Some of the videos our kids have created have garnered international attention. One such video was featured in a newspaper in Italy and earned an award for best EduCast.

We have added an accompanying Twitter chat to go along with the cross-state podcasts. The #StuConnect podcasts and new Twitter chat are an example of what can happen when video and connected education theory collide. This integrated strategy increases engagement of constituents while amplifying student voice. It's a communication strategy that breathes new life into traditional administrative practices.

Cutting-Edge Communication

If your primary communication strategy with parents involves a newsletter or e-mail then a shift towards video could inspire greater levels of engagement. Each year I create principal baseball cards that feature a photo of me on the front and some fun facts (including my contact information) on the back. The baseball cards also feature a video message that can be activated using augmented reality technology. The various filters and tools within the TouchCast app have empowered me to create videos that seamlessly link to the still image on the front of the baseball cards. When a parent holds a tablet or device up to the baseball card it morphs into a living, breathing video of the principal welcoming students.

It's one of those things that you truly have to see to believe! In one example, the still image on the front of the baseball cards featured me seated in front of an old-fashioned typewriter holding a quill pen. In the background was a photo of our district's first high school circa 1900. The green-screen tool and sepia effect in TouchCast made it seem as if the baseball card screenshot was literally created 100 years ago! You can see the video here:

http://www.touchcast.com/tca2015/greenwood_elementary_brad_gustafson/?ref=tca2015&p=channel https://www.youtube.com/watch?v=2LwitSx9Bt0



When the video was activated the transition to my digital greeting was seamless because the same sepia effect was applied to the video in the TouchCast studio. The most common response when people view the augmented reality baseball cards and video greetings is "No way!" and "How did you do that?!" The engagement level for students and parents is off the charts. We've created other innovative experiences by "App-Smashing" with TouchCast and augmented reality platforms.

One of the most innovative and immersive examples utilized a special filter in TouchCast that converts video into a drawing. This allowed me to create a school flyer on paper that started out as a cartoon, and transitioned to an unbelievable video. When all was said and done, the video that was linked to the flyer using augmented reality technology seemingly made the drawing appear like it came to life! The video can be viewed here: http://www.touchcast.com/tca2015/cdfe1ccb22/?ref=tca2015&p=channel https://www.youtube.com/watch?v=uj9UOoGUkaQ



The bar has been raised and educators need to continue innovating so that students also have permission to innovate using video and other technology in school.

We need to hold ourselves to a very high standard when it comes to innovating for our students. The status quo is not an option. Paper communications and e-mail serve a purpose, but educators need to be mindful of emerging trends and other options for communication. Video has helped me crush the quo in new and engaging ways, and being connected allows me to learn from some of the most innovative educators in the field.

Meeting the YouTube Generation where They're At

One benefit of being connected is that I get to try out many new ideas that educators from across the country share with me. I was recently communicating with Superintendent Joe Sanfelippo in Wisconsin and he shared an idea to announce new staff hires to families using a video press conference concept. I knew that I wanted to try this so when we started hiring new staff this past summer I got to work.

I started by requesting some fun and educational facts from each of the new teachers I had hired. Then I designed a virtual press conference background for use in TouchCast's green-screen tool. The background featured our school's logo and hashtag and resembled the aesthetic that many professional sports team use on their press-conference backdrops. Next, I prepped some V-apps that included the photos of new staff and title bars that included teachers' names and Twitter handles. After that, I produced the press-conference in the theme of an All-Star draft show using the green-screen digital background I had created.

Feedback from families was phenomenal. They loved seeing the video of their new teachers and the All-Star press-conference theme contributed to greater engagement than a traditional newsletter would have. Video allows us to meet families where they are at in a format they are familiar with. Video can enhance traditional school events like Open House too.

Flipped Open House

When our school wanted to improve Open House for our families I knew that video could be a catalyst to a transformed experience. Our Open House was traditionally comprised of a meet-and-greet with teachers and separate grade-level curriculum presentation for parents. During these curriculum presentations our students would separate from their parents to convene in the gym for an assembly. This would allow teachers time to go over curriculum and grade-level routines.

However, we found that the overall practice was not as student-centric as we had hoped. Some students experienced separation anxiety from their parents, and those families with multiple children struggled to navigate the complicated curriculum presentation schedule. We leveraged video and the tenets of flipped instruction to transform the experience for families.

We now send short pre-recorded curriculum videos home to families so they can view them prior to Open House. This allows us to focus on our students and developing relationships at our face-to-face Open House. Flipping our Open House was easy.

I used TouchCast to create the administrative series of flipped Open House videos for families. During preproduction I collected photographs and video clips that demonstrated how a connected pedagogy was being used to enhance student learning. A variety of V-apps and special effects were added to the videos to provide families important information about teaching and learning in our school. During post-production I incorporated some animated trailers and title bars into the videos to provide a professional aesthetic. The result was a series of highly professional videos that helped us prioritize the relational underpinnings of Open House that are absolutely critical in an elementary school. At the same time, we were able to use video to provide concise content to families to view. An unintended benefit has been that families who were unable to attend Open House or those who enrolled at our school after Open House can still access the curriculum videos to connect to our amazing staff. Open House is not the only thing a school can 'flip' via video.

Amplifying Student Voice via Video and Staff PD

Professional development (PD) is one of the most important things that school leaders support. Sharing short video clips during a keynote or staff workshop to add humor or drive home a point can have a big impact. However, sharing a short video with participants BEFORE a workshop can have an even greater impact. We use TouchCast to support flipped learning experiences for staff.

Sometimes these flipped PD videos include educators from other schools, and sometimes they include our very own students. Pre-production of our flipped PD videos requires identifying clear learning objectives for the upcoming meeting. Once these staff learning objectives are identified I purposefully plan what V-apps and approach to use in the videos.

For example, when we wanted to plan a culinary-themed PD experience for staff that involved reflection and collecting feedback for the following year's PD planning we used TouchCast to send pre-recorded directions explaining the process. The four minute flipped video was produced using a "Top Chef" format and featured students who were dressed as chefs. Our students took turns explaining how the meeting would run so that when staff arrived at the actual meeting they could dive right in.

When school leaders use video to maximize learning time together they not only honor the time and busy schedules of staff, but they model meaningful technology integration. involved in the production a culture that amplifies student voice is forged. By including educators from other schools and states a connected pedagogy can also be experienced by staff. The power of video to bring people together while transforming PD should not be underestimated! The power and flexibility of video podcasts for professional development is equally impressive.

Podcasting to Lead and Model Learning

Instructional leaders have a responsibility to engage with the very same digital-age learning and video curation that students and staff are involved with. Delegating this important responsibility could damage credibility and diminish the advancement of a connected pedagogy. When I started the #30SecondTake podcast I knew that I could better support student learning if I was immersed in video content creation myself.

The #30SecondTake podcast is produced using TouchCast. Each episode features multiple educators who respond to a guiding question in 30 seconds or less. Pre-production involves collecting video clips from educators across the country. The clips are spliced together using the video import tool within TouchCast. After that, I create an introductory video clip that is added to frame the guiding question and introduce guest hosts for the episode.

Next, the videos are produced and shared out on a variety of social media channels as well as iTunes. After publication, educators everywhere respond with their thoughts about the guiding question and which guest host's response resonated. This often leads to follow-up blog posts and offline conversations about student learning. You can see dozens of examples of the podcast here:

http://www.touchcast.com/tca2015/30_second_take_episode_1/?ref=tca2015&p=channel_http://www.touchcast.com/tca2015/30_second_take_episode_2/?ref=tca2015&p=channel_https://www.youtube.com/playlist?list=PLCpynLvlgGNYWC4Vyx3piqm1quYRJLOlu

The process parallels exactly what we'd aspire for our students. Collaboration, creativity, and the production of meaningful content published to YouTube results in engaging conversations about learning. Modeling this creative process through podcasting is an important first step, but it can't be the last. We've got to support teachers so they can ensure classrooms are vibrant communities where creativity and content creation is also nurtured.

Class Co-Teaching and Student Podcasting

Since I began doing more podcasting I've noticed the use of video increase dramatically as a learning and communication tool. Students and staff in our school are creating some really engaging content. Sometimes I'm lucky enough to be invited into a classroom to help co-teach using the TouchCast app.

As a TouchCast Ambassador and active user I think I may take for granted the vast array of V-apps available to users. However, when I work with a new group of students I'm quickly brought back to the powerful realization that the tools kids are interacting with for the first time are completely different than traditional worksheets or how kids might be accustomed to approaching paper-based projects. Video is a medium that offers limitless opportunities to show learning at very deep levels.

The critical thinking that's possible provides for differentiation and personalization like never before. Kids are able to apply their own background information, interests, music, and content to add meaning to project-based learning. Student podcasting and the TouchCast app translates to kids being able to create content that has the same impact and professional aesthetic that many studios and professional speakers put out there. It's truly like having a studio in the classroom!

TED-style Talks and TouchCast

This past school year our 5th graders looked forward to Tuesdays. Why Tuesdays?!? Their teacher started a tradition of showing a TED Talk to the kids every Tuesday and students LOVED it. They couldn't get enough. Then, something really special happened. Their teacher empowered students to create their own TED-style Talks in TouchCast using green-screen and some of the same parameters that real TED speakers are bound by.

Now, our students are like TED speakers as they create videos sharing their powerful ideas with the world! Sometimes the videos are shared on Twitter just like some of the more popular TED Talks are. Students are sharing ideas, presenting genius hour projects, and talking about their personal experiences such as trips they've taken, using TouchCast. As powerful as student creation can be, the collaboration that can be inspired is not to be underestimated.

Global Green-Screen Project

This fall we launched a new global initiative to inspire collaboration through a shared video experience. The Global Green-Screen Project is an innovative version of the classic shared writing experience many of us enjoyed as children. You may recall when a teacher wrote a story-starter on a sheet of paper and passed it to a student seated in the front row. The student would add a sentence and pass the paper to the next classmate who was often seated in the row behind him/her. The story evolved as each student added twists and turns to the plot.

Instead of adding a sentence the Global Green-Screen Project prompts classrooms around the world to contribute a 20-30 second video clip created in green-screen. It's an opportunity to nurture creativity, connectivity, and digital leadership while interacting with Common Core State Standards in an innovative way! Some of the more elaborate video clips were created by classrooms who are using TouchCast's 'Studio-in-a-box' components and the green-screen tools found within the app. All a class really needs to join is a green-screen and digital device to record and publish. Thanks to the transparency afforded to us by the connected ecosystem we find ourselves in, you can follow along via hashtag #GlobalGSP on Twitter: https://twitter.com/search?q=%23GlobalGSP

Transformative Learning through a Connected Pedagogy

The merger of video and the connected eco-system that the YouTube Generation is part of has the potential to create transformative learning experiences. It is absolutely critical that a new and connected pedagogy be implemented if we want to engage a new generation of learners. Our kids are counting on us to empower them with cutting-edge tools and opportunities to create within a connected pedagogy.

How Touch Cast supports the Common Core Standards By: Beth Crawford



ABOUT BETH

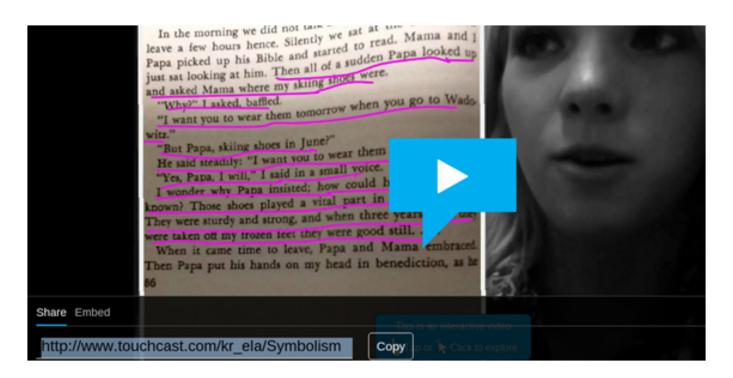
Beth Crawford graduated from Kent State University with B.S. in English and Spanish in 1998, followed by a Masters of Education in Instructional Technology in 2002. She teaches College Composition along with a variety of English electives for Kenton Ridge High School in Springfield, Ohio during the day and New Media classes for Clark State, a local community college, online. Because she teaches in a tiny district in Southwest Ohio, she finds her professional learning network (PLN) on Twitter and often reflects about teaching on WordPress. When she has a spare moment, she loves to interact with the ISTE Relmagined community online. She finds Touchcast to be a powerful interaction tool and appreciates being a Touchcast featured Educator and Ambassador.

Touchcast in the Trenches: How one teacher used Touchcast to support Common Core Standards

FACILITATING STUDENT CREATIVITY

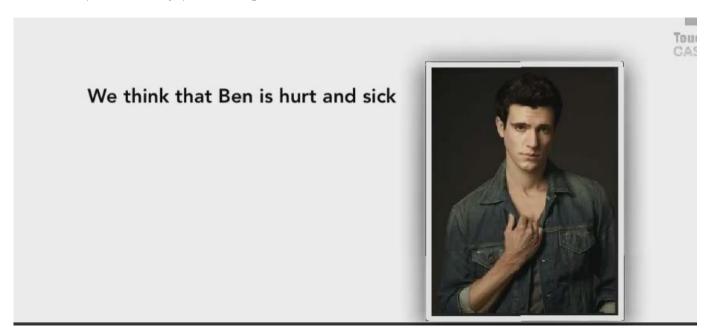
One major struggle I have encountered with most video creation software is the time it takes for students to learn how to use the product. I am often faced with a dilemma; I can't spend instructional time teaching students how to use technology, but I love to use it so students can demonstrate their learning. Touchcast has neatly solved this time crunch for me, because it is so intuitive to use. When I assign students Touchcast projects, they are meeting Common Core standards in a hands on way that takes very little class time on my part. For example, in order for students to demonstrate the literary devices they discovered in their summer reading assignment, I had students assemble in small groups, plan what they would say and which pieces of textual evidence they would present, and record short video segments, using the "glass" whiteboard feature, the camera on the iPad, and the teleprompter to create. I was glad to see them be able to identify literary devices, as it not only demonstrated a Common Core Standard for Literature (CCSS.ELA-LITERACY.RL.9-10.4) but it also held them accountable for the annotations in their summer reading. All I had to do was explain what I wanted and hand the iPad to the students. Students informed me that the Touchcast app was easy to learn and that since many of them owned iPads, iPods or iPhones, they were comfortable with navigating the app.) However, because we had access at this point to only two iPads, student groups took turns recording with them in the hall. By planning ahead of time what they would say, as well as determining which examples they would demonstrate, my students fulfilled the Common Core Standard for Speaking (CCSS.ELA-LITERACY.SL.9-10.1.B.)

http://www.touchcast.com/kr_ela/Symbolism



My students completed these videos in the first few weeks of school, and it was a great indicator of the amount of technology they could be expected to use responsibly, thoughtfully, and productively throughout their year with me.

My advanced students aren't the only ones who have demonstrated their learning with TouchCast, my regular sophomores have demonstrated their learning as well, showing a grasp of indirect characterization through the use of claims and evidence. My students applied the Common Core principles to their comprehension of our class novel, *The 5th Wave*, by creating short videos that showed, rather than told, what character traits Ben Parrish, a character in in the novel, exhibited. The process for the project was the same as it was for the advanced group: students had to find their examples and plan ahead before ever touching technology. To allow for each pair to create their video, I borrowed a few iPads from a fellow teacher, brought the students to the library and had them spread out, which saved a monumental amount of class time. Creating these videos helped students demonstrate a number of Common Core Standards (CCSS.ELA-LITERACY.SL.9-10.5, CCSS.ELA-LITERACY.SL.9-10.6, CCSS.ELA-LITERACY.RL.9-10.3.) I used this as one summative assessment of the novel, one that my students enjoyed creating.



(http://www.touchcast.com/kr_ela/indirect_characterization_3c) Even though we didn't have class time to read the entire novel in class, many of them not only finished the book on their own time, but they also went on to read the sequel and are now eagerly awaiting the movie adaptation

FACILITATING MEDIA LITERACY AND TEACHER SANITY

Another problem that Touchcast solves for me is the challenge of bringing projects home to grade. In the past, I had the unappealing choice between staying after school late to grade posters or trying to take them all home in my car. Now that I can have students create videos to demonstrate their learning, I no longer have to haul posters back and forth. This is true of any digital media but what makes Touchcast so helpful is the way it enables my students and me to rethink what constitutes a project. For example, when I want my Media Literacy students to illustrate their grasp of how advertising works through creating counter advertisements, they can use the actual advertisement footage in their videos, as opposed to using magazine cut outs on a posterboard. They use their voices, other websites, and polls to capture their audience's attention and prove their argument using these supplemental materials as evidence. By using primary sources and engagement tools, students are synthesizing, the highest of Bloom's Revised taxonomy, as well as utilizing rhetoric and logic, two important parts of the Common Core State Standards. (http://www.touchcast.com/kr_ela/counter_ad2).





Using primary source documents by importing a video and enriching that primary source with additional sources is extremely powerful because for the first time students are combining multiple medias in order to share their thoughts. The media literacy tools that students learn in my class prepare them for the digital age that we live in and provide them with a skillset that is applicable outside an academic institution. Asking students to analyze the media that makes up their daily life helps them to become aware of the ways it impacts them. And not having to haul a myriad of posters home in my car is just an added bonus.

REACHING A WIDER AUDIENCE

One of the other many benefits of Touchcast is that it allows for an authentic audience for student creations. This is a challenge for my small, mostly rural, district. In the past, the largest audience students could expect was their peers, or maybe just their teacher when they performed a memorized



scene from Julius Caesar. Using Touchcast, we expanded our audience to the world. Students worked together to write, produce, and record modern version of a scene from the play. We prepared the scenes using our Google tools, drafting and creating the scripts as well as planning the camera angles we would use. We used the green screen feature to make our production look semi-professional. My students knew that these scenes would go out to the world; this real audience was a powerful motivator. (http://www.touchcast.com/kr ela/act 1 scene 2)

And when I shared my "modernized Julius Caesar" lesson with the International Standards for Technology Education Reimagined group, teachers from around the world saw my students' work and praised us.





Some great #studentcentered lesson plans here: twitter.com/isteconnects/s... - Love the modern version of Julius Caesar! via @isteconnects



https://twitter.com/rwootenits/status/639066754870718464

If you'd like to see a copy of the lesson, it is attached at the end of this chapter.

IMPROVING MY PRESENTATIONS

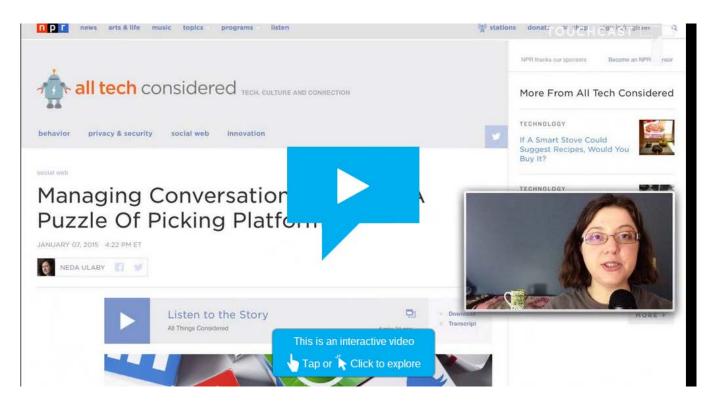
Touchcast has not only been a solution for students in their educational creations, it has also been a solution for me as a teacher. One challenge I face as a classroom teacher is chronic absenteeism. I found myself meeting before and after school repeating the same information over and over again, for students who struggled to keep up with the direct instruction other students received in class. When I began creating instructional videos for absent students, I knew the quality of my presentation was consistent. I also knew that students could pause and replay the video as many times as they needed, to ensure they had transcribed the notes correctly.

The ability to pause and replay video is not unique to Touchcast. What is revolutionary through TouchCast is the ability to add interactivity to videos, which changes not only the content but also the outcome of the video. Touchcast enabled me to include examples that students can manipulate for themselves. I could refer briefly to what I wanted them to see, and students could see for themselves

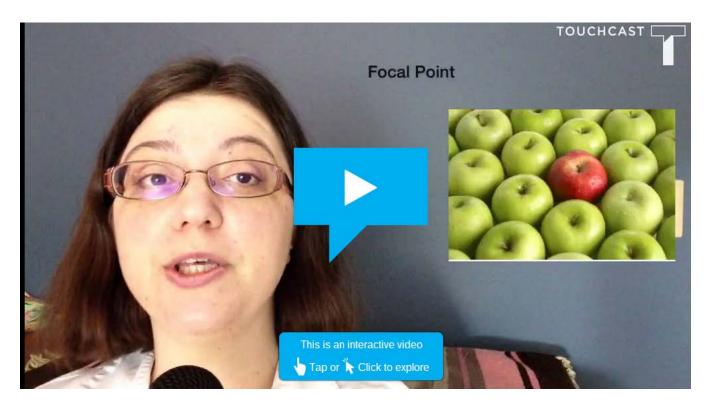
the original content. The interactivity of Touchcast improved my students' test essays as well as my district's success in promoting digital literacy, enhancing my instructional videos overall.

eLEARNING

Like many of my peers. I have a part time job in order to make ends meet, Currently, I work part time for Clark State's New Media department, teaching online classes. Since I don't see my students face to face, this type of instructing has posed completely different challenges than those of my high school classes. Most of the content that students are required to learn is provided via static text but I find that it is Touchcast's interactive video platform that has really helped these virtual students grasp the material. For example, although my Social Media & Digital Interactivity students have read about Twitter and created accounts, I was able to give them specific examples of how businesses use Twitter.



(http://www.touchcast.com/tc_crawford/how_businesses_use_twitter) For my Digital Aesthetics students, I give multiple examples of the principles of design.



(http://www.touchcast.com/tc_crawford/principles_of_design) | did my_best_to_anticipate_which_topics_l knew my students would need to see, not just read, and embedded them into our Blackboard course. The number one suggestion my students had at the end of the course? More videos!

I am looking forward to implementing Touchcast again this school year with my new classes. Will my College Composition 11th graders create multi-genre persuasive videos to persuade their stakeholders? Will my Creative Writing students choose a "field trip" location and pitch it to us as a writing spot? Will my Science Fiction and Fantasy students create book trailers to entice each other to read new books? I know one thing for sure: Touchcast is a powerful arrow in my quiver, easy to use and easy to learn, and I look forward to using it more in the future.

A Modern Julius Caesar

Summary of Lesson: In this six week unit, students will grasp how the Shakespeare play *Julius Caesar* relates to the modern world, by first studying the play itself and then by creating a modern version of the play. These modern versions were published by Touchcast, an international video app company, and publicized as an exemplary lesson on their EduCast Lesson Plan portion of the Touchcast site.

Prior to reading the play: I created an interactive trailer to the play, demonstrating for students not only why the themes of Julius Caesar are relevant today, but also the Touchcast app that students will use as a performanced based assessment at the end of the unit.

https://www.touchcast.com/kr ela/julius caesar

Flip lesson standards fulfilled:

- Common Core Standards
 - o CCSS.ELA-Literacy.SL.9-10.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest. Elements to include in initial video:
 - Why is Julius Caesar still relevant today?
 - Absolute power corrupts, dictators get overthrown, fate vs free will
 - CCSS.ELA-Literacy.RL.9-10.9 Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare). Modern adaptations (how *Mean Girls* and *Pretty Little Liars* both take the themes of absolute power corrupting)
- ISTE Standards for Teachers
 - o 1c: Facilitate and inspire student learning and creativity--Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
 - o 2a. Design and develop digital age learning experiences and assessments--Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity

During the reading of Julius Caesar: Students utilize www.curriculet.com to read the play outside of class. Curriculet provides free Common Core aligned formative assessments, videos, and annotations to aide in student comprehension of the text. This link provides an opportunity for teachers to use the curriculet I modified for my classes. The formative assessments are helpful in guiding daily discussions and reteaching opportunities, as they demonstrate which standards cause students to struggle and allow students to spend. The annotations provided are important because they allow students who need extra support to spend extra time with the text, learning such things as how to identify emerging themes.

In addition to using Curriculet, students will use the Learning Management System in www.schoology.com to take a summative test of the play, prior to the performance based assessment. Only those students who demonstrate a mastery of the play's original content will continue on to the final performance based assessment.

Curriculet & Schoology Play Standards Fulfilled

- Common Core standards
 - o CCSS.ELA-LITERACY.RL.9-10.1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
 - CCSS.ELA-LITERACY.RL.9-10.2: Determine a theme or central idea of a text and analyze in detail its
 development over the course of the text, including how it emerges and is shaped and refined by specific details;
 provide an objective summary of the text.
 - CCSS.ELA-LITERACY.RL.9-10.3: Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme
 - CCSS.ELA-LITERACY.RL.9-10.4: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).

- o CCSS.ELA-LITERACY.RL.9-10.5: Analyze how an author's choices concerning how to structure a text, order events within it (e.g., parallel plots), and manipulate time (e.g., pacing, flashbacks) create such effects as mystery, tension, or surprise.
- o CCSS.ELA-LITERACY.RL.9-10.6: Analyze a particular point of view or cultural experience reflected in a work of literature from outside the United States, drawing on a wide reading of world literature.
- o CCSS.ELA-LITERACY.RL.9-10.9: Analyze how an author draws on and transforms source material in a specific work (e.g., how Shakespeare treats a theme or topic from Ovid or the Bible or how a later author draws on a play by Shakespeare).

ISTE standards

- o 2a Communication and collaboration: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others--Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- o 5c Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior--Demonstrate personal responsibility for lifelong learning
- o 6a Technology operations and concepts:--Students demonstrate a sound understanding of technology concepts, systems, and operations. Understand and use technology systems
- o 6c Technology operations and concepts: Students demonstrate a sound understanding of technology concepts, systems, and operations. --Troubleshoot systems and applications

Before beginning to create the performance based assessment, students will complete technology release documents, which give Touchcast the right to use the videos on their website and in their newsletter.

Final Performance Based Student Lesson Examples: from the play Julius Caesar

https://www.touchcast.com/kr_ela/act_1_scene_1

https://www.touchcast.com/kr_ela/act_1_scene_2

Prior Knowledge Necessary for the Performance Based Assessment:

- Elements of a play
- An understanding of how lighting, scenery, and costuming can affect audience understanding of
- An understanding of how movie directors reveal characterization.
- The major characters & plot elements of the play Julius Caesar by William Shakespeare.
- The techniques of annotating & close reading.
- Creative Commons copyright license

Student lesson standards fulfilled:

Common Core Standards:

- CCSS.ELA-Literacy.RL.9-10.3 Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme.
- CCSS.ELA-Literacy.RL.9-10.7 Analyze the representation of a subject or a key scene in two different artistic mediums. including what is emphasized or absent in each treatment (e.g., Auden's "Musée des Beaux Arts" and Breughel's Landscape with the Fall of Icarus).
- CCSS.ELA-Literacy.SL.9-10.5 Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
- CCSS.ELA-Literacy.W.9-10.3a Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.
- CCSS.ELA-Literacy.W.9-10.3b Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
- CCSS.ELA-Literacy.W.9-10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.)
- CCSS.ELA-Literacy.W.9-10.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grades 9-10 here.)
- CCSS.ELA-Literacy.W.9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

ISTE Standards for Students:

- 1a: Creativity and Innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.--Apply existing knowledge to generate new ideas, products, or processes 1b. Creativity and Innovation: Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology--Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
- 2a. Communicate and collaborate: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.--. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- 2d. Communicate and collaborate: Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others--Contribute to project teams to produce original works or solve problems:
- 5a. Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior--Advocate and practice safe, legal, and responsible use of information and technology
- 5b. Digital citizenship Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior--Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity

Overview:

After reading the play *Julius Caesar*, students will film a scene from the play. This scene will be written in modern English. The scene should reflect an accurate depiction of the major characters and plot elements of the chosen scene, as well as accurately depict the elements of a play, such as stage directions. In addition, students will choose appropriate backgrounds to enhance the scene, as well as appropriate costuming. They will attempt to film from multiple angles, using both lighting & sound to their best advantage. Working within the groups, students will choose roles that suit their best interests, such as script writing, set design, directing, or filming.

Materials:

- Copy of Shakespeare's Julius Caesar, from Project Gutenberg
- Touchcast App
- Green screen
- Apple iPad
- Google Drive

Procedures:

- 1. Students will break into groups of 3-4.
- 2. They will decide which scene in the play they want to depict.
- 3. CCSS.ELA-Literacy.RL.9-10.3 Using Google Drive and Project Gutenberg's online copy of *Julius Caesar*, students will do a <u>close reading</u> of that scene, identifying the major plot elements and characterization evident in that scene. They will annotate the scene to reflect their close read, using the comments in Google Drive and sharing the resulting file with me.
- 4. After determining what the most important plot and characterization elements exist in the scene, students will work together to create a modernization of that scene, leaving the basic major elements intact. To begin this process, students will create a <u>cartoon storyboard</u> to plan their scene. Next, students will create a <u>textual storyboard</u>, which will help students plan more than 1 camera angle and background to film. They will search the internet for Creative Commons licensed work to use with the green screen mode in Touchcast, or they will take photos with the iPad to use in the app.
- 5. CCSS.ELA-Literacy.RL.9-10.7, CCSS.ELA-Literacy.W.9-10.3a, CCSS.ELA-Literacy.W.9-10.3, CCSS.ELA-Literacy.W.9-10.4, CCSS.ELA-Literacy.W.9-10.5, CCSS.ELA-Literacy.W.9-10.6 Once students have created a storyboard of events, they will write the <u>dialogue</u> and stage directions for the scene. No more than 2-3 characters can speak at one time, and all student members need an equal amount of speaking parts. This script will clearly depict the situation, use narrative techniques such as dialogues and asides, create a smooth progression of events, be clear and coherent, and be revised and edited to remove any errors. To create the script, students will share a document with each other in their Google Drive.
- 6. CCSS.ELA-Literacy.SL.9-10.5 Students will select appropriate lighting, background, costumes, and scenery to enhance their interpretation of the scene.
- 7. Students will sign up to film after school, and will all as a group film their re-enactment using Touch-cast. They may use the teleprompter if they wish, but no other notes. Dialogue should appear polished and well rehearsed.

Assessment:

- Rubric for grading final product:
- http://rubistar.4teachers.org/index.php?screen=ShowRubric&rubric id=2406508&

How TouchCast evolved my teaching with video By: David Lockhart



About David

David Lockhart is an edtech presenter, speaker, advocate, and coach. For over 10 years, that meant stepping into a High School Social Studies classroom, and delivering instruction in a way that was just different. By August of 2014, his students were learning history in a historical news room concept that saw students create everything from social media accounts to news broadcast. In October of 2014, David left the classroom to become an Education Technology Specialist with the Iteach Center at Kennesaw State University. As part of the Iteach team, David is working with a metro Atlanta school district in order to personalize learning for students with the aid of technology. David has also presented on numerous education technology topics throughout the Southeast including ISTE, FETC, GAETC, AETC, and more.You can learn more about David through his website bigguyinabowtie.com or his twitter handle @bigguyinabowte

Video has always been a part of what I do. I believe it is a great way to engage students, and I think that there are so many different ways one can use it in the classroom. It truly is a multi-use tool, and there are not many of them out there. Video has the power to provide influential learning, and hopefully learning about my journey with video in the classroom can help you to accelerate your own.

MY HISTORY OF TEACHING WITH VIDEO

I started my career in 2004 as a Social Studies teacher in the Northern Virginia / Washington DC area. Integrating video within the classroom was a part of what I did from early on, but it probably wasn't utilizing it to the best of its capabilities. My implementation was basic: I showed hollywood movies, occasionally, I would introduce a documentary as well. Forgive me, but this is what we had in 2004. This was truly before the YouTube generation, because YouTube did not begin until 2005. I thought this course of action wasgood because I learned so much from digital media like movies, and I wanted to share that experience with my students. I believe my intentions were pure, but I was just a few years ahead of my time. What I really needed was the digital revolution.

In 2007, I moved to Georgia and my experience with video vastly improved. When I came to my new school district in Georgia, I was given the option of receiving a MacBook. In 2007, that was the only option if you wanted to truly work with video. iMovie was released as a product in 1999, but up until 2007 Apple was really only known as the company behind the iPod. They were starting to gain ground as a creative force in the computer market, and in 2007, after the first iPhone was released, the floodgates opened for Apple. I was one of those folks who took notice, and that's why I chose the Macbook way back then.

That Macbook provided me with my first exposure to iMovie. I began to experiment with creating my own videos. It was genuinely an experiment from the start. I sensed that the potential for the classroom was there, but creating video was time consuming. I also only had my one Mac, so there was very little I could do to get my students involved in the creative process. By 2010, I was armed with the resources necessary to finally get my students involved in video creation. Thankfully, I had an administrator who shared my vision, and he was able to get four Macintosh computers for my classroom. It was on.

My experiments with video development in the classroom began very simply. I had students use the Macs to create a news broadcast for our Rome unit. There were not many limits to what they could do, and I would change a great deal about the setup of this project. I think the biggest issue was that I allowed the kids to set off without much instruction or supervision, and this resulted in some of them producing videos containing questionable content such as sword fights. I now know that I need to make sure every video project has a solid and structured process for my students to follow. I should have had them go through a procedure that required them to goal set, plan, and reflect--a major component of this being the composition of a script.

While there were many things I would do differently, I think the key elements were still present. Students were engaged. I had students who were previously not involved, become enthusiastic about their learning. They got excited about the lesson now that they had a stake in its course. It also allowed me to put students in the middle of history. The students could create projects that let them experience the environments they had been flatly reading about, and I determined that was something I could not lose.

By 2011, I was ready for more, and thankfully 2011 was a big year technological developments. The first major thing that happened to me was I changed jobs. I moved to a school that actually had carts full of Macbooks. This opened up a world of possibilities for my students and me. I started imagining of all kinds of projects that could fit the different content in my units. Though I decided that many of these projects would have video involved, I still desperately needed a way to organize them.

I was shocked by what ended up providing me with the method to construct these projects--the concept of differentiation. Before 2011, I was like many who asserted that I differentiated by giving students different ways to get content and learn. But this wasn't enough, I was not providing students with different assignments based on their learning levels. That changed when I began to devise a plan for these video-based projects. As I overviewed all of the student project ideas, I began to separate them into different categories based on a student's level. I built out these project ideas as a webquest, and I presented those links categorized on my website. I then went to wikispaces, and I designed a wiki that allowed students to view each of the categories they were to pick from. Basically, the wiki was setup where students each had their own page on the wiki, and on that page was an assignment checklist. From that checklist, students could assess which project categories they were to pick from.

Where does video come into this? It was the mode that many of these final projects took the form of. The beauty of video is that it allows a multitude of choices for students, and they certainly utilized video's many benefits for these assignments. I offered my students a plethora of projects:creating a commercial for the new territories in the United States or for one of the armies during the Civil War, interviewing people in history, doing historical reenactments such as one of the American Revolution Battle, creating interviews with people from the time periods like the Jamestown colonist, and creating news broadcasts such as one centered around the Salem Witch trials.

The benefit of using video for these projects is that I could create differentiated levels within the video choices. For a very low level type assignment, students could produce something as simple as interviewing folks on a particular topic. More advanced students, on the other hand, were challenged to create more complex videos that required more editing such as producing a very refined commercial. I also differentiated video creation by the topics that I had students review. For instance, a commercial that ask for a simple sell of a product could be a lower level project while a campaign commercial for a political philosopher could be for the more advanced.

FLIPPING MY CLASSROOM WITH TOUCHCAST

The other big component that changed my teaching style was was the debut of the iPad in 2011. The iPad did not become a major player in the video creation game until the debut of iPad 2 in 2012. The first iPad did not have a camera, but as soon as Apple added it to the second model in 2012, the device became a formidable contender in the classroom video movement. It proved to be a device that could easily record video and edit video which was huge!

While the flipped classroom movement had been around since 2007--maybe even earlier, the expansion of mobile device availability and complexity lead to its increased popularity. I began to experiment with this concept in 2012, and let's just say it was a learning experience. I started with the flipped classroom by doing screen captures on my laptop, but it took me several years to really get to a point where I was comfortable with flipping my class. When I started with flipping my class, I started with simple screen captures on my Mac. I then moved to using Screencast-O-Matic, and then even went further with iMovie. However, none of these worked out very well. The videos were time consuming to put together, and in the end they weren't interactive or captivating enough. The students were bored with them, and I was starting to get the "you're not teaching us" argument.

While this struggle with my flipped classroom endeavors did partially discourage me, it also taught me a few things about what "flipping my classroom" truly means. The first thing I learned is that getting students to merely watch a video at home is very difficult. Students today already have difficulty completing their homework, and asking them to watch a video on somewhat of an honor system is virtually impossible. The second thing I discovered was that since many students were so trained in the traditional system of learning, flipping the classroom felt like an impossible task. Thus I needed to be somewhere between the flip and traditional, which meant that I desperately needed a new tool.

In 2013, I discovered that tool in TouchCast. TouchCast allowed me to make videos with more than just screen captures and, beyond that, it opened up what I could add for students. It made it easy to record video tutorials and flipped videos from my iPad. The app has so many great tools included within it, but where it really started to take shape in my classroom is with what TouchCast calls vApps. vApps allow the creator to insert supplemental materials into a video that can perform in ways they cannot on any other platform—they are interactive! I can put websites, social media feeds, videos, and a plethora of other supplemental materials into my TouchCast, and the video user can touch, interact with them, and use them at their discretion. Users no longer have to exit your video to view the materials you are referencing with this system. ! This made TouchCast the perfect tool for me because I could create a flipped video talking about the Declaration of Independence, for example, and insert the actual text of the document within the video for students to simultaneously read while watching. There is really nothing else like it out there.

TouchCast can incorporate almost every video editing tool imaginable or desired. The editing tool that was the most remarkable to me upon my first creation was the built in teleprompter. I felt discouraged watching the many professional educational videos on YouTube, feeling as though mine did not measure up. One of my greatest insecurities was having to rely on my memory or, worse, needing to periodically look down at my notes. TouchCast provided an excellent solution by allowing me to have my script play before my eye while I recorded my video. There are a multitude of other tools that are incorporated in the app that enable me to enhance my videos. So many that I am still experimenting with the abundance of possibilities. My favorite is certainly the built in green screen functionality. This allows me to transport my audience anywhere, and it has become a big part of how I use the app with students. TouchCast also exhibits transformational features such as: built in titles, sound effects, and a white board! These tools are invaluable in enhancing my audience's engagement and understanding.

Remember when I mentioned that I discovered TouchCast in 2013? Well, that's true, but at first I saw it as just a cool tool to present on. In 2012, I started doing edtech presentations based on a 60 apps in 60 minute format so I was always looking for something that is different, and TouchCast definitely fit that category in 2013. Fast forward to the ISTE Conference in 2014, and I had that head slapping "Duh!" moment with it. TouchCast was about to become the centerpiece of everything that I did in the classroom, and it was going to become a MAJOR part of my education technology website edtechspeeddating.com.

At this point in my career's trajectory I took a step back for some self-reflection. I realized that although I had accomplished much--successfully integrating video into my classroom while boosting the possibilities for differentiation--and although I felt incredibly proud I still couldn't shake the feeling that something was missing. I realized that what I was missing was a cohesive motif to tie the many disparate elements I had been introducing in class. TouchCast became the centerpiece to that theme. I came to the conclusion that I would compile my aspirations by turning my class into a historical newsroom--a culminating project of a complex news broadcast using TouchCast.

Armed with the slew of tools TouchCast provides I was pressed by the extreme constraints that a US History course dictated by a state test presents. I knew where I had to begin--with a cohesive structure. The project commenced with background knowledge aggregation, this process was carried out by students in the first couple of days.On background knowledge days, students had a choice: they could either listen to my lecture or they could work on their projects and watch the TouchCast video at home. For the lectures, I created TouchCast's instead of a traditional PowerPoint, I punctuated my videos with over-animated recaps of the pertinent information (as I am known to do). I amplified my efforts by using Symbaloo to organize, which enabled me to put TouchCast and Youtube versions of my videos side by side, and allowed me to assemble the videos in a comprehensible order. The entire venture turned out amazing! What was great about it is that students really took to my style of direct instruction, and for the few who did not were faced with a multitude of resources to aid them. You can see an example of this setup here: http://www.lockhartushistory.com/american-beginnings2.html

That took care of directions, but I wanted to have students further their knowledge on the subject similar to how any good reporter would proceed. I decided I wanted to structure this around the video power of Youtube, and Symbaloo gave me a great way to do it. I built Symbaloo Youtube walls for my students to further their knowledge, and I placed these on my website. I did not just make students watch these though. There had to be some kind of assessment right? There sure was, and it was structured around teaching my students a skill. They had to evaluate the videos as sources! They filled out an OPVL (ask for Origin, Purpose, Value, and Limitation of the Source)sheet for every video they looked at, and this skill was put in place to help them as they went further down the line into their digital projects.

The unit was to culminate with a full News Broadcast using TouchCast, but I still had to differentiate. This is where Symbaloo came to the rescue again, it allowed me to create differentiated workflows for my students. I created directions for each assignment in Google Drive and then embedded them in a workflow format on my webmixes. I realized I needed to provide alternates to the project--one of these other assignments manifested as DBQ's I decided to assign a number to each of the workflows. When student's saw this number, it directed them to pick a project from the category with the same number. Each of the numbers were based around a theme. The themes consisted of several options: parodies (, social media, writing (which included the DBQ's), and, finally, a news broadcast. Each of these sections additionally had a student editor to provide the students with a peer review process, plus to simulate the editorial process of a real newsroom. After a project was peer reviewed, students had the option to improve or to simply turn it into me for a grade. These projects were posted to a unit website to reach an authentic audience. You can see it here: http://www.lockhartushistory.com/birth-of-a-nation1.html

INTRODUCING TOUCHCAST TO TEACHERS

After this successful experience, I changed jobs and became a technology coordinator. Where I advise teachers about uses of technology in the classroom. In December of last year, I began working with a 7th Grade Science teacher who had bought a green screen at an iPad heavy school. As I searched the app store, I noticed something: all of the green screen specific apps cost money. I initially had ruled out using TouchCast because I thought students had to log in to upload their video, which I did not find conducive for the work of thirteen year olds But I discovered that I was mistaken, if a student does not log in to the TouchCast app, they can still create a video, and even download it to the camera roll as well. It made TouchCast a perfect fit, and this 7th grade science teacher had students create solutions proposals for the EPA to answer an environmental threat using the news broadcast feature in TouchCast.

One of my biggest successes with TouchCast has been introducing it to my friend Megan Endicott who uses it with her elementary music classes. Megan uses TouchCast to create leveled instruction. She creates three different videos with different tools to produce three—different requirements. She also uses the annotation feature to model. Megan is a TouchCast and a Green Screen expert. She has used it to put together a concert etiquette video, and she has taken it school wide through all of the great things she is doing with other teachers in the school. 4th Graders have used it to do great weather projects, and in the 5th grade they are about to use it as a culminating project in order for students to travel back in time for Social Studies using the green screen. If you want to see some of Megan's examples you can find them at: http://www.TouchCast.com/dolvin_music/group_1_writing_solfege_pictures, http://www.TouchCast.com/dolvin music/everything is possible/? ref=mychannel, and https://www.youtube.com/watch?v=h6lOPFOiv50

In closing, I believe that video is a great multi-use tool pertinent to classroom learning, but it naturally scares many teachers. Many teachers see it as something that is difficult to learn and incredibly time consuming. Hopefully, my story will quell some of that fear, and maybe it will even accelerate other educators journeys with video in the classroom. In today's world, video editing is easier than ever with TouchCast. You can seamlessly and impressively truly use it in many ways, and it can be a great tool for what we want for our students: to be engaged and to create.

Touch Cast: Magic in the Making By: Zee Ann Poerio



About Zee

Zee Ann Poerio, K-8 Computer Teacher, St. Louise de Marillac Catholic School.

Wouldn't it be great if we could wave a magic wand to make our students ready for the challenges that await them after graduation? Unfortunately, there is no magic spell for it, but with the TOUCHCAST APP there is the possibility for Magic in the Making.

We are in the midst of an educational and cultural shift where it is no longer sufficient to be a passive consumer of media and information. Rather, it is important for students to apply practical skills to the digital world. Students are no longer taught simply how to process information, but to analyze and synthesize, by creating, presenting, and sharing with an audience beyond the classroom walls.

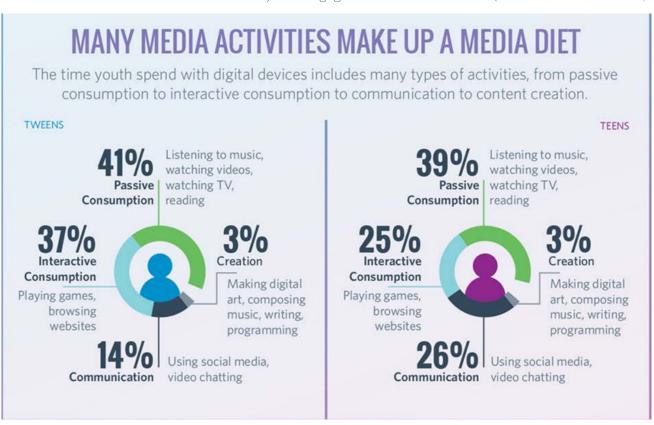
We are moving away from listening to the yearly book report in reading class and the hanging of posters in the halls for social studies projects. Presentations are going high tech and reaching global audiences as student work is shared on wikis, websites, blogs, YouTube, Twitter, and other forms of Social Media.

Those who wish to succeed must change from being passive learners to becoming future-ready creators for a global audience. This process of creation is changing the landscape of education. Teachers must take advantage of this maker movement and provide students with the necessary opportunities, experiences, and guidance during this period so they can fulfill their primary objective as educators: to prepare students for success by being problem solvers who are strong, contributing members of society.

There's An APP For That

As a teacher for over 18 years, I have used many tools, tips, and techniques to motivate and engage my students, but nothing compares to the success I have had with using the TouchCast App in the classroom. This new form of media truly captivates the students and provides challenges to build critical thinking skills, opportunities for creativity and collaboration using technology, discussing digital citizenship, and a place for others to view and interact with their work. These 21st Century skills are part of the National Educational Technology Standards (NETS) published by the International Society for Technology in Education (ISTE). (Visit http://www.iste.org/standards/ISTE-standards/standards-for-students for more information on this resource for k-12 teachers.)

Student have access to the tools (cell phones, iPads, digital cameras, movie making programs, etc.) but aren't making the best use of them. Teens and Tweens are primarily consumers not creators. Common Sense Media's "Common Sense Census: Media Use by Tweens and Teens," a recent study of students ages 8 - 18, found that 53% of all Tweens have their own tablet and 67% of all Teens have their own smart phone. The study further shows that teens average 9 hours of screen entertainment media use per day, but only 3% of the this time involves activities where they are engaged in content creation. (Common Sense Media, 2014).



(Detail from infographic above. See the full infographic here: https://www.commonsensemedia.org/ the-common-sense-census-media-use-by-tweens-and-teens-infographic#)

(Full study here)

Rideout, Vicky, M.A., VJR Consulting Inc. (2015) Common Sense Census: Media Use by
Tweens and Teens. Common Sense Media, 21. Retrieved from
https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens

Even though students have access to the necessary devices to create content, their primary use of technology is still "passive consumption" with the largest percentage being "listening to music, watching video, TV or Reading." (Common Sense Media, 2014) As teachers in the 21st Century, our responsibility is to better direct our students and provide the opportunities for active learning and making. TouchCast allows teachers and students to do just that. The TouchCast app is readily available on the iPad and is, most importantly, free to teachers and students. All of TouchCasts features--including its easy to use interface, the ability to quickly record and editing video, as well as add sound effects, music and social media--appeal to and encourages students' interests in media.

I have found that the best way to meet educational goals and the needs of my students is to engage them by providing handson activities where they can create interactive experiences using tools which are accessible, easy to use, intuitive, and fun. TouchCast does that.

How can TouchCast change our students from the CONSUMERS of content to the CREATORS of the content and allow for DEEPER LEARNING that will last a lifetime?

TouchCast provides the perfect project-based learning opportunity and makes it possible for students to publish for an authentic audience and take pride in their work. TouchCast fits nicely into the maker movement and should be part of every school's MakerSpace.

How to Make the Magic Happen: Teacher Dives In First

I am an early adopter of technology and when I found TouchCast, I knew it would change the way I would use media with my students. Before introducing new tools to my students, I like to "model the making" and make something myself to show the students and generate interest. I found that TouchCast was the perfect tool to document my attendance and participation at conferences. I could pack a lot of information and resources in one place and easily share it with other teachers and students. By adding links, PDF files, social media handles, hashtags, and live feeds to the information presented in a TouchCast, it's more convenient and others appreciate the time saving aspect of having resources pop up within a TouchCast as soon as they are mentioned so the viewer can check them out immediately and go back to them when needed.

And no more bouncing from App to App. TouchCast has the features that you want from multiple apps, but all in one place. TouchCast has a plethora of incredible apps that students love using. The green screen allows them to add special backgrounds, their own photos, and hand drawn images to their recordings. Using the whiteboard/annotation tool, students can write the steps to a mathematical equation as they explain the process. They can also label, add arrows, or or draw over specific areas of a poster or project that is displayed in front of the camera as they record narration. The special effects filters can change live video to black and white or sepia tones for throwback video history projects. Students use the sketch and edge detection effects to transform their recordings into moving cartoon films. They have fun with adding sound effects such applause or laugh tracks in game show segments.

The ultimate feature is the built in themes with TV studio backgrounds which magically transports a student sitting at a classroom desk in front of blank wall into a sportscaster in a million dollar TV studio. The script can be added to the built in teleprompter and the text appears to the right of the camera lens, so that when the student reads, he appears to be looking directly at the viewer which looks very professional. Websites, social media, and other online classroom resources can easily be incorporated through the VAPPS (video apps) feature. It is also possible to add a TouchCast inside of a TouchCast and projects can be copied, easily edited, and shared.

I immediately saw the value of this tool in education and like my students, I learn by doing. I watched a few of the tutorials, and spent time exploring the features that I wanted the most and then added more to the mix. I loved the fact that the TouchCast Team was interested in helping teachers. There are specific educational resources, like this book, an online newsletter, and blog at: http://www.touchcast.com/blog/. If I had additional questions, they were answered immediately. (Support was fantastic, I e-mailed TouchCast about equipment recommendations and they immediately sent me a list of equipment. Others had made similar requests so TouchCast support created a TouchCast with links to the professional equipment that they were using in their studio. Now TouchCast offers a Studio in a Box that is perfect for teachers and classroom use. (See https://www.touchcast.com/studioinabox/ The TouchCast team listened when teachers made suggestions on how to improve. Teachers wanted a little more than the original TouchCast recording time limit of exactly 5 minutes. TouchCast responded and now recording time has been extended to 20 minutes. Also, for Flipped Lessons, teachers were recording using the front facing camera with classroom posters behind them. The text on the posters would be reversed, so TouchCast added the mirror option to reverse the camera feed on the front facing camera. Our voices were heard and the tool kept improving along side me. The more I used TouchCast, the more I learned about myself as an educator. And the more I learned about all the features, the more I tried to do with it. The "magical spell" was cast over me, and I was enchanted! I was inspired to present TouchCast at conferences. One of my first presentations on TouchCast was an Ignite session at ISTE in 2014. TouchCast was new and many people were surprised at all that it could do. It was my first experience at ISTE and I was inspired to create a TouchCast to document the conference and thank those who made it possible for me to attend. I wanted to bring back tips and best take-aways from other attendees, so I interviewed some attendees at ISTE and was able to share it with teachers who could not attend.

A year later, I attended ISTE again and made a new TouchCast to document that conference. Some of my colleagues had never been to ISTE, so using TouchCast, I created a short Vine styled video to share the excitement of the exhibit hall. I am an avid picture taker and had always documented events with photos, so when I returned, my family, friends and colleagues would look forward to looking at my online photos as I would recap the event. Now, with TouchCast, I can put everything in one place and I don't have to recap the story over and over. I can just send them the link to the TouchCast. It is a great time saver and it makes it easy for others to share with their friends and colleagues. I went on to present TouchCast at other local, state, and national conferences and I enjoyed interviewing other attendees in the halls for what I called "Hall Duty" at the conferences asking attendees what they would use tomorrow or share with colleagues. I added VAPPS which would link to the tools that were mentioned after recording the interviews, so that these would become mini professional development videos to share and a way to charm others with TouchCast.

ISTE Ignite Session Slide with Audio Narration http://www.touchcast.com/stlnn/hook_your_students_with_touchcast/?ref=stlnn&p=channel

ISTE 2014 Thanks with links http://www.touchcast.com/stlnn/iste 2014 thanks from zee/?ref=stlnn&p=channel

ISTE Interviews at End of Conference Best Take-aways http://www.touchcast.com/stlnn/iste interviews /?ref=stlnn&p=channel

ISTE 2015 Thanks with links http://www.touchcast.com/stlnn/iste2015 copy/?ref=stlnn&p=channel

Overview of ISTE Exhibit Hall - Short Clips Vine Style http://www.touchcast.com/magistrazee/iste_tuesday/?ref=magistrazee&p=channel

Hall Duty at PETE&C

http://www.touchcast.com/stlnn/hall duty with magistrazee at petec 2015/?ref=search&g=hall%20duty

TouchCast as the Magician's Assistant: Our Unique experience using TouchCast as a Meaningful Learning Tool

Once my students observed how I was using TouchCast, they saw opportunities to use it immediately. The green screen effect would be great for our morning announcement weather reports. Students were so impressed by the professional quality of what they could produce, that everyone wanted in on the act. They learned quickly that it worked best if they planned the segments at least a day in advance and followed these steps:

- 1. Go to the internet to research the weather for the next day. They used weatherbug.com our local weather channel which gives us permission to use the weather maps.
- 2. Take a screenshot or download an image of the temperature map for the day, along with the image of the day of the week with the high temperature.
- 3. Save the images to the camera roll of the iPad for recording with TouchCast.
- 4. Open a new TouchCast and create a Title Slide with the first name, homeroom, and grade level of the weather reporter.
- 5. Go to effects, tap green screen, click on the photo icon on the right and select the temperature map from the album on the camera roll.
- 6. Swap the camera with the button on the lower right and hold the ipad in front of the green screen. (We painted a wall with chromakey Green paint. You can purchase a green screen on a stand, a pop up green screen, the TouchCast Studio in a box which has chromakey fabric, hooks, mounts for your devices to add to a tripod, and a microphone. (See https://www.touchcast.com/studioinabox/ for more information.) You can also use green bulletin board paper or purchase a plastic green table cloth. Even without Chromakey paint or fabric, if you shoot your video in front of solid color wall, you can finetune and remove the background color using the dropper and settings under the Green Screen effects.
- 7. Add the script to the teleprompter or print a copy of the script if you are recording younger students. For younger students, have an older student act as a prompter to feed them the lines before the weather reporter says them on the recording.

First shot: Hi,	I am(first name of student)with your weather.	
Second Shot:	(Motion with your hand to indicate where the weather information	on will
appear as the	camera person taps the app to appear.) Today it will be	_ with a
high of	_ degrees.	

Third Shot: (Put your hand down at your side and the camera person will tap the app to remove it from the screen.)
(Smile) Enjoy your weather!
(If you practice, this can be done in one take without pausing the camera.)

- 8. Click on Vapps and Add a Vapp, choose photo and select the image of the weather forecast with the daily high temperature.
- 9. Position the Vapp to the left of the screen and tap the cog gear to turn off sound effect which makes a POP sound when the slide pops on the screen.
- 10. Save the project.
- 11. Practice with the weather reporter.
- 12. Ask them to position their hand where they will point to show the daily temperature VAPP as it pops in. Move the Vapp so that it will appear slightly to the left of where the student will point or raise their hand.
- 13. Make sure the reporter is looking at the camera. We point to the lens and tell the reporter to "look here," be happy and smile.
- 14. Give the reporter a three, two, one, and then point with your finger to indicate action.
- 15. Leave space at the beginning and end of each recorded segment. With younger children, it works best to record each line of the script. Do multiple takes and then edit your final product.
- 16. Save and post the link to the TouchCast online or download the video and add to your show.

Our first weather forecasts featured our student Media Club members. Everyone looked forward to the weather forecasts, because they loved the green screen effect. Later students added props and costumes, like coats or holiday hats and even an umbrella. We started recording the weather outside, and our viewers loved to see how our studio turned "mobile." Everyone wanted a chance to be a weather reporter, so we invited younger students to try it. One of our math teachers wanted to surprise his class by doing the weather one day. Since the segments were filmed in advance, the class was amazed when Mr. Wagner was reporting the weather on our news show while he was in his classroom at the same time. We invited our foreign exchange students to present the weather here and in their home country, Spain. They reported in English and Spanish. They were able to share the TouchCast with their school in Spain, which was a fantastic way for the students to connect with their families and for our students to learn more about their country.

Later we expanded our TouchCast to make commercials for school events. Other teachers and classes wanted to use TouchCast for projects. Mrs. Lorence's students used it for a Language arts lesson to read their Dr. Seuss style poems. My Exploratory Latin Class presented a retelling of the legendary myth of the founding of Rome. We also documented the fun of field trips and made TouchCasts to record the memories. Students learned that creating TouchCasts took planning. Just like writing a paper, you need an outline, drafts, and rewrites. They learned the value of discussion with each other to develop an idea for their TouchCast. They used a storyboard to plan their shots. They gathered the photos, websites, and links that they needed and they worked together to assign roles. TouchCast provided for project based learning at its best.

Madison with Temperature Map http://www.touchcast.com/stlnn/weather_copy_1/?ref=stlnn&p=channel

First Graders Report the weather http://www.touchcast.com/stlnn/dd0e2bb7f5/?ref=stlnn&p=channel

Media Club Member reports the weather from outside http://www.touchcast.com/magistrazee/WeatherforSTL/?ref=magistrazee&p=channel

Mr. Wagner, Math Teacher reports the Weather http://www.touchcast.com/stlnn/weather_mr_wagner/?ref=stlnn&p=channel

Foreign Exchange students report the weather here and in their home country http://www.touchcast.com/stlnn/weather_friday/?ref=stlnn&p=channel

Fish Fry Commercial http://www.touchcast.com/stlnn/fish_fry_friday/?ref=stlnn&p=channel

The Amazing Race School Fundraiser http://www.touchcast.com/stlnn/the amazing r4ce stl/?ref=stlnn&p=channel

Screen Free Week http://www.touchcast.com/magistrazee/screen free week

Coin Museum Exhibit Invite Commercial http://www.touchcast.com/stlnn/f961bea98a/?ref=stlnn&p=channel

Dr. Seuss style Story for Language Arts http://www.touchcast.com/stlnn/dr seuss style stories by 2nd graders/?ref=stlnn&p=channel

Founding of Rome Myth http://www.touchcast.com/stlnn/myth of the legendary founding of rome /?ref=stlnn&p=channel

Sportscast with studio background http://www.touchcast.com/stlnn/stl_sports/?ref=stlnn&p=channel

Kennywood Day Field Trip http://www.touchcast.com/stlnn/rides_games_food_thanks/?ref=stlnn&p=channel

The highlight of our year with TouchCast was when our students were invited to the Pennsylvania State Capitol for the Student Technology Showcase where the students used the skills they learned to interview, create, record, and teach others about TouchCast.

Pennsylvania State Capitol Student Technology Showcase with Senator Matt Smith http://www.touchcast.com/stlnn/1fe2a53a02/?ref=stlnn&p=channel

TouchCast Worked Its Magic

Our school received a MAC (Make Activities Count) Grant for successful use of handson projects. It was the experience that our students gained using TouchCast that made this award possible and enabled us to purchase lights, tripods, and microphones for our studio. In addition, a group of our TouchCast media students produced a video for a contest and were the only middle school students to become finalists in a contest dominated by high schools. And finally, three 5th grade students used TouchCast for their entry in film contest sponsored by SteelTown Entertainment in Pittsburgh and won first place for best narrative. There was a cash award for each student, a donation made to a charity of their choice, and a cash award to our school which was used to purchase additional technology for our Computer Lab. These students were challenged to use their creativity and used TouchCast to teach others and share knowledge with an authentic audience, for outstanding feedback and recognition. TouchCast empowers students to become creators, producers, writers, digital storytellers, expert reporters and media publishers. Students understand that they can create media that can be used at school for assignments, discussions, and assessments. It also teaches them the value of collaboration, the importance of digital citizenship and copyright issues, while giving them an authentic audience. It's magic!



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Educators are the catalysts and the driving force of shaping TouchCast for the important cause of creating meaningful learning experiences.

Please join us today and become a TouchCast educational pioneer! We would love to receive your insight and feedback, as well as, answer any questions you might have.

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THANKS

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