

A S B P E

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Allow Me to Introduce Myself

James Hopper

- Chair, Professor Web and Digital Communications
- Johnson County Community College
 - Degrees I am responsible for
 - Web Technologies AAS
 - Interactive Media AAS
- I am in my second millennium at JCCC
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Examples of Digital Storytelling

- Let's begin with a couple of examples:
 - Google Chrome: Dear Sophie



https://youtube.googleapis.com/v/R4vkVHijdQk

Examples of Digital Storytelling

- The Ailing profession: An animated short film
 - By dvm360



http://bit.ly/1m1W3Y6

Story

"A fact, wrapped in an emotion that compels us to take an action that transforms our world."

- Robert Dickman

Introduction

- Digital Frontier is a dynamic new space
- Digital storytelling is the practice of combining narrative with digital content
 - Persuasive
 - Instructional
 - Historical
 - Reflective
- Digital Storytelling is limitless



Reasons to use digital storytelling

- Digital Storytelling is an application of technology to the oral tradition of knowledge transfer
 - Build on this model
 by incorporating rich,
 dynamic media
- The process of creating a digital story forces storytellers to
 - choose a topic
 - that can be appropriately conveyed to a particular audience with electronic elements in the time available



21st Century Skills

Digital Literacy

 The ability to communicate with an ever-expanding community to discuss issues, gather information, and seek help

Global Literacy

 The capacity to read, interpret, respond, and contextualize messages from a global perspective

Visual Literacy

The ability to understand, produce, and communicate through visual images

Technology Literacy

 The ability to use computers and other technology to improve learning, productivity, and performance

Information Literacy

The ability to find, evaluate and synthesize information



Social TV: Communal audience interaction



80% of **smartphone** owners, **81%** of **tablet** owners and **73%** of **laptop** owners use their devices in front of the TV

eCustomerServiceIndex (eCSI) survey, July, 2012



Storytelling

- Stories are how we connect
- Stories and anecdotes tell
 - Who we are
 - What we care about
 - Where we are from
 - Where we are going





Storytelling

- Stories are how we share and remember knowledge
- Stories are how we entertain
- Stories are how we teach





Storytelling

- Before the written word there was oral storytelling
- Digital storytelling is fundamentally the application of technology to the age-old tradition of sharing personal narratives



What is digital storytelling?





- A digital story typically begins with a script
- The storyteller then assembles rich media to support the ideas and emotions in that script
 - music or other audio effects
 - personal or public-domain images
 - animations or video
 - other digital elements
- The storyteller pieces together and edits the digital story



- Uses computers
- Media rich
 - Video
 - Audio
 - Music
 - Images
 - Pictures
 - Animations
- Uses the Web to share
- Creates community on a global scale
- About making connections



- Growing availability of sophisticated tools
- Maturing infrastructure
- Refinement of multimedia applications
 - Allowing more people to tell stories
- The rise of digital storytelling parallels the rise of social media and video sharing sites
 - Digital stories need the social media and video sharing outlets
 - Social media and video sharing sites need the rich compelling content being created



- Digital stories have the potential to increase information literacy
 - Visual
 - Digital
 - Textual
- Encourage critical thinking and exploration through multimedia applications
- Digital Storytelling forces storytellers to choose a topic
 - that can be appropriately conveyed to a particular audience
 - In the time available





Digital storytelling allows us to tell, package and share our story



- Nothing is written in stone
 - There is no one way to tell your story
 - There is no one definition of what makes something a story



- As you research and read about digital storytelling you will see
 - Seven steps
 - Eight steps
 - Six elements
 - Kurt Vonnegut had 8 rules on how to write a good story
 - Six things that make a story go viral





Digital Stories

- Are personal
- Begin with the story/script
- Are concise
- Use readily-available source materials
- Include universal story elements
- Involve collaboration at a variety of levels

- Digital stories are personal
 - What story do you want to tell?
 - What do you feel your story means?
 - What emotions best tell your story?

- Digital stories are narratives
 - Help us make sense of things
- We learn from stories and remember their meanings
 - Because they are personally understandable
- Stories penetrate human understanding and engage feelings
- The deeper the emotion
 - The deeper the learning

- Personal
 - The story must be told from your point of view
 - It is your voice!
- Short and natural
 - Convey more with less & make it sound natural
- Selective
 - Make the salient points detailed to make the scenes realistic and authentic

- Comprehensible
 - The story has to be explicit enough so that the audience can follow you on the journey
- Structure your story
 - Most stories have a beginning, middle and end
- Show, don't tell
 - Help listeners imagine themselves in your story by adding story details or supporting imagery



- Begin with a script that focuses the writing before audio and video are created or manipulated
- Are quite personal with the narrator making it clear how something or somebody impacted her or his life
- Are concise at two to five minutes long with story narrowed down to a single nugget of one central idea



- Use easily-available source materials such as still photos, hand drawings, scanned images, transition effects, and recorded narrative
- Include universal story elements of conflict, transformation and closure in a way with which the audience can identify and be changed
- Involve collaboration in which people give and receive feedback during scripting and production
 - Dr. Anthony Curtis UNCP Mass Communication



The Language of Storytelling

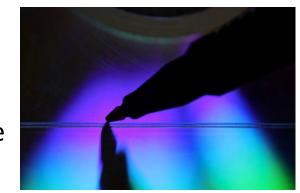




The Language of Storytelling

Rule 1: Clarity

 The audience, whether it's a reader, viewer or player mustn't get confused or lost in the attempt at conveying the story.



Rule 2: Realism

The Reality Rule is about creating a sense of realism, which goes as far back as early theater, where the nature of "realism" became a movement. The more realistic the sets, costumes, people and even the dialogue, the more believable the story.

Rule 3: Dynamic

 Dynamic imagery should always be in the service of storytelling and not at the expense of the storytelling.

The Language of Storytelling

Rule 4: Continuity

 All the elements of the story; characters, objects, landscapes, structures, etc. should be consistent throughout the life of the story.

Rule 5: Intuitive

Orson Welles once said, "I passionately hate the idea of being 'with it.' I think an artist has to always be out of step with his time."
 The various formulas to move the story forward are enhanced by "those [filmmakers] ready to take a stand and go in the opposite direction."





How Long Should my Digital Story be?

- The "Real" Answer:
 - As long as it takes to get your message across



Living in the story

- The perspective of each story is told in first person using your own storytelling voice to narrate the tale
- Share through the story
 - who you are
 - what you felt
 - What this event or situation meant for you in a personal way
- Rather than a detached telling that this happened and that happened, viewers experience you living inside this story
- Your story is shared through the heart, NOT the head



Lessons learned

- One of the most unique features of this specific digital storytelling style is the expectation that your story expresses personal meaning or insight
- A good story has a point to make, a moral conclusion, a lesson learned, or an understanding gained
- The author develops a personal connection to the story facts by answering "So what!"
- Each story needs to have a point that is revealed in the end either implicitly with the media or stated explicitly with words on how the topic matters



Creative tension

- A good story creates intrigue or tension around a situation that is posed at the beginning of the story and resolved at the end, sometimes with an unexpected twist
- A hook is created to intentionally draw the viewer into wondering how it will unfold and how will it all end
- Pacing is an invisible part of sustaining story tension as we know so well from movies
- Pacing uses starts, stops and pauses, letting us wonder what will happen next and how will it be resolved



It's told economically

- A good story has a destination, a point to make, and it seeks the shortest path to its destination.
- The art of shortening a story lies in preserving the essence of the tale using the fewest words along with images and sound to make your point.



 Both words and media need to reveal through details rather than being named or simply stated





Elements of good storytelling

Craftmanship

- A good story incorporates technology in artful ways demonstrating craftsmanship in communicating with images, sound, voice, color, white space, animations, design, transitions, and special effects
- All media elements are selected to illuminate the meaning of the tale rather being bells and whistles that become distracting, overused, or misused or simply used to illustrate what is being presented
- Good craftsmanship creatively combines media elements to convey significant meaning rather than being used for "decorating" the story
- Ask whether your media resources are decorating, illustrating, or illuminating



Elements of Good Storytelling

Showing not telling

Good stories use vivid details to reveal feelings and information

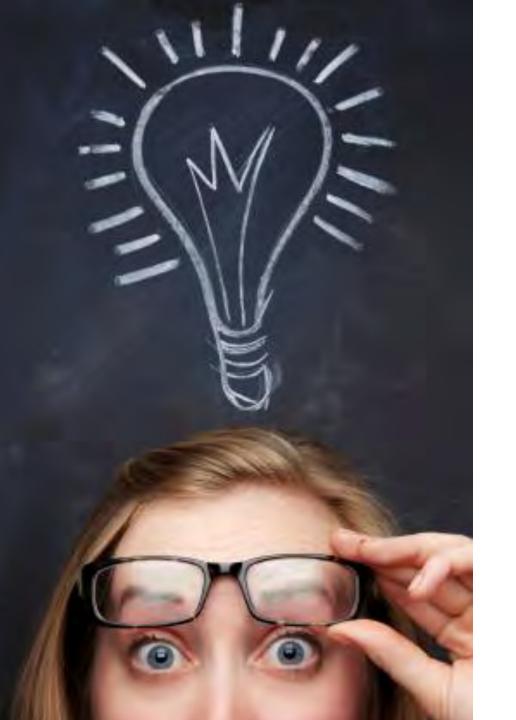
It was a dark and stormy night does not have to be said in the

script





WHERE DO YOU BEGIN?



STORY IDEA



MAY I TELL YOU A STORY?



Digital Storytelling is Personal Storytelling

- Founder Richard Sears had a talent for connecting with customer needs
 - By branding his catalog as a Wishbook
 - He sold more than glassware and topcoats
 - He offered affordable dreams at a time when local general stores offered a limited to the variety of goods
 - The genius achievement was turning his customers into brand evangelists



Digital Storytelling is Personal Storytelling

- What is my story about?
 - It's not just about the product
 - It's about the company image and the storytelling

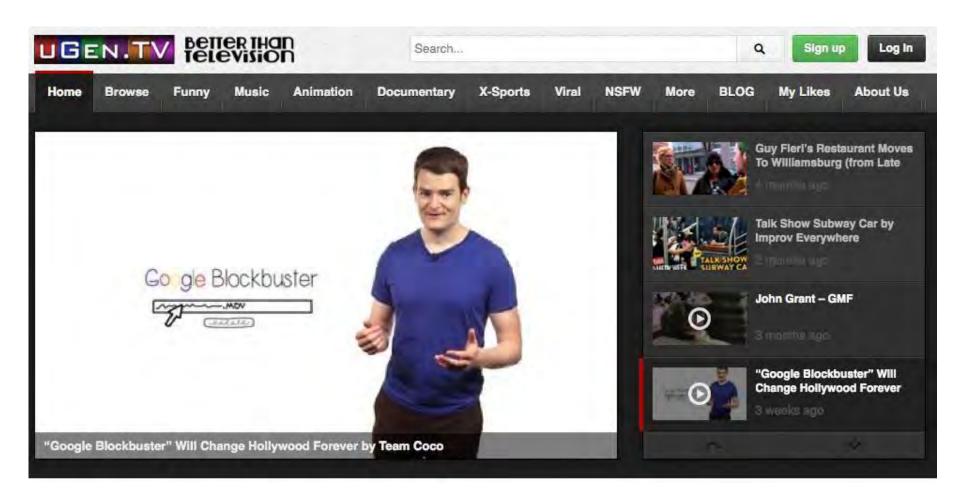




Digital Storytelling is Personal Storytelling

- That's where digital storytelling comes in
 - Instead of talking at the customer
 - Companies are successfully talking with them
 - Customers are talking back
 - We are all content creators
- Companies have left the rarefied atmosphere of one-way communication
 - And entered a time of co-creating content

Co-Creation; Consumer Created Content





The Key

- Company image and actions must meet the standards of the brand story
 - Customers demand truth
 - Companies that can't deliver are crucified across all platforms of social media



Gather Your Materials

- Harvest your artifacts in order to create compelling stories
 - Stories can be used to promote products to the public
 - Use these digital stories to create and preserve your company histories
 - How your company has evolved in their history
 - This can help you to continue to advance in your field
- Start gathering old photos, vintage film reels, digital video, flyers, mementos



Gather Your Materials

- Don't think you have to go out and capture a story with a camcorder or camera
- Use what you have!
- Older "found materials" usually prove to pack more of an emotional appeal



MAY I TELL YOU ANOTHER STORY?



- In the 1920s Canadian humourist John Robert Columbo and Science fiction author Arthur C. Clark
 - Bet Ernest Hemingway he could not tell a complete story in six words
- Hemingway writes
 - "For sale: baby shoes, never worn."
 - Hemingway collects his earnings
- Hemingway is said to have considered it his best work





- Keep your story to less than 500 words
 - Which works out to about a page of single-spaced text
- One of the elements of digital storytelling
 - Economy
 - Emphasizes the simplicity of digital stories
 - Your images you may not need narrative explanation
 - Think of your story as a multimedia sonnet
 - With characteristics of poetry



- Although carefully scripted, a voice-over is written to be spoken
 - No one listening can see spelling errors or bad grammar so write it as you would speak it
 - it's not an address
 - nor a lecture





- The voice-over is not just words
 - It's about the way you speak those words
 - Your voice is unique
 - Your voice is important to the meaning of your story
 - You are not an announcer
 - You are not merely performing lines



- You are narrating the story as you would tell it to a friend
- If you use a manner of speaking which is not your own
 - You will spoil it
- Be yourself





- A story is like a journey
 - It is very easy to set off in the right direction
 - never reach your destination
- Ask yourself
 - "What is my story about?"
 - Do not include anything which dilutes the story

STORYBOARD





Writing the Storyboard

- A storyboard is a written or graphical representation of the all of the elements included in your story
- The elements are organized in the chronological order they will appear in your story
 - This allows you to organize and re-arrange the content for maximum effect



Writing the Storyboard

- Storyboards give you a way to decide how you will split up your script into individual pieces
 - With or without placeholder images
 - You can then get a clearer overview of your digital story plan

Writing the Storyboard

- Storyboards may be created in a variety of ways
 - Digitally
 - Analog
 - Paper
 - Artist's Board
 - Recording audio is key
- If storyboards are developed digitally
 - Microsoft Word
 - Microsoft PowerPoint
 - Microsoft Excel



SHORT [3-5 mins.]

Combination of text, images and sound

Off-the-shelf Stories Stories

software

First person video narrative



DIGITAL STORYTELLING TOOLS



Getting Started

- Hardware
 - A reasonably recent computer
 - A digital camera
 - A flatbed scanner
 - A microphone
 - iPhone Boom Mic
 - A video camera
 - Music
 - A smartphone
 - iPhone or Android



Getting Started

- Software
 - A movie/media editing program
 - iMovie on Mac
 - Movie Maker on Windows
 - An image editing program
 - PhotoShop
 - -GIMP
 - An audio editing program
 - Audacity
 - The audio capabilities that are part of the movie editing program



AUDIO AND SOUND



Separate computer and microphone

- Your camera or computer produces a small hum
- Microphones pick that up
- As much distance as possible between your computer and your microphone
- Get your microphone as close to the narrator as possible to avoid unwanted noises

Adjust audio recording level

- If the level is set too low, your audio will have background noise when you turn the volume up to hear it properly
- If the level is too high, you will hear distortion



Microphone Techniques

- Experiment with audio delivery
 - How you sit, stand and move will determine what you audio sounds like

Sitting

- This seems to be the default for recording narrative for digital storytelling
- Good mic technique says "talk directly into the mic"
- Because you are reading, you are sitting still at a desk
- This can restrict expression



Microphone Techniques

- Standing
 - This means putting your mice on a microphone stand
 - Plugging the mic into your computer
 - It is easier to move your body, which in turn helps you inflect your delivery
- Wearing a headset
 - Using a headset combination mike and headphones allows you to move your head without having to worry about not speaking directly into the mic
 - Your natural inclination is to be more expressive



Microphone Techniques

- What you do with your body as you record your voice-over narrative will greatly affect what your narrative sounds like
- Use your body to help you speak your words



- Avoid plosives and sibilance
 - Popping "p" sounds or harsh "s" sounds are very distracting
 - Avoid them by positioning your microphone slightly away from your mouth
 - Don't point it to your nose or you'll catch your breathing in the recording
 - It's best to point it slightly toward your chin
 - Keep the microphone close
 - Consider purchasing a pop filter



- Room Tone
 - Before and after you record your narration
 - Record a few seconds of silence
 - It helps to record it in case you need to fill a gap in your narration or erase a mistake
 - Sounds more natural to have room tone in gaps compared to no sound
 - Recording 30 seconds in the same environment
 - Can save your recording



- Create some drama in the narrative
 - Speak clearly and give emphasis to your words
 - Picture the images you'll be using
 - Provide emphasis to the words you think will have a powerful image attached to them
- Pace your narration
 - Speak slowly to provide pacing to your words



- Take a breath
 - Take your time
 - Use small pauses to create some tension and build up the story
 - Your audience is hearing your story for the first time



Prepare the Story Elements

- Audacity is a free
 - Audio editor and recorder
 - Windows
 - Mac OS X
 - Linux
- http://audacity.sourceforge.net/about/





The Power of Music

- Music is used in various ways
 - As part of the story
 - As background music within the story
 - As background music to which only the audience is privy
- Music is used to complement
 - Cartoons
 - Comedies
 - Action-adventures
 - Science-fiction
 - Drama



The Power of Music

- Think about how music makes us feel
 - The theme from Rocky makes us feel powerful and conquering
 - The theme from Jaws creates a sinister feeling of suspense
- Music can overtake a story
- Make sure your music supplements your story
 - When it is the other way around
 - You have a music video



DIGITAL VIDEO



- I hope to
 - Inspire
 - Instruct
 - Empower

You explore what you can do with digital video



How Do I make a Digital Story Worth Watching

- Tell a story with the video
 - Before you shoot a single frame
 - You should know exactly how you want your story to be told
 - What you want your audience to take away from your video



Camera

- I shoot my stills and video with a
 - Canon EOS Rebel SL1
 - 1920x1280 1080p video
 - RAW images
- Smartphones produce excellent quality video and stills
 - The iPhone is a wonderful tool for shooting videos
 - Accessories such as tripods, microphones and chargers are available
- In some cases the video may not require editing before posting it to social media sites



- We have all seen web videos that are
 - too long
 - badly shot
 - generally impossible to watch from start to finish
- There is a language to video
 - Let's introduce a bit of vocabulary



Visual Grammar

- Shot
 - Sentence
- Establishing Shot
 - Topic Sentence
- Scene
 - Paragraph
- Effects and Fades
 - Transitions between Paragraphs
- Pans/Zooms
 - Run-on Sentences



- Why should I learn about editing video?
- Video editing is about technology and production techniques
- There is a technical side to video editing
- There is also an opportunity to extend storytelling deeper into the production process
- Many of the decisions made in the editing phase have a big impact on stories
 - Pacing
 - Structure
 - Sequencing

Shooting Your Video

- The message you want to deliver
- Quiet, well lit location where you feel comfortable
- Eliminate any background noises
- Use a tripod
- Shoot a few seconds test video
- Review the footage for good lighting and sound
- The video is ready to share

Non-linear & Nondestructive: Video Editing Freedom

- Video editing software is non-linear
 - This is the ability to jump from any place in a sequence to any other place
 - Forward or backward
 - Making it possible to
 - Cut and insert footage
 - Change the order of the shots and scenes

Non-linear & Nondestructive: Video Editing Freedom

- The ability to move fluidly from one point in an edit to another provides incredible flexibility to the editor
- More nimble workflow
 - One in which fewer compromises have to be made in how a story is structured



- Video editing software is nondestructive
 - Editing are reversible
 - This applies to many kinds of changes
 - When we cut raw video into smaller, more focused segments



- Video editing is a process of refinement
 - Excess is trimmed away
 - More precise cuts as things progress
- What if too much has been taken away?
 - Nondestructive editing means any footage cut can be restored



Basic of Editing Video

- Import recorded video from a video camera to your computer
 - Whether you digitize the video from tape
 - Import from a disc
- Use a video editing program to
 - Create scenes
 - Rearrange scenes
 - Remove unwanted parts
- Add any music, pictures, titles, transitions, or effects that you want to use
- Preview your changes
- Save your edited content as a new video file



Video Editing

- This will be a not so hands-on workshop
 - Let's go over a few things that I think audiences are looking for in a video
 - I don't feel I can show a video editor since there are so many
 - Luse Adobe Premiere Pro
- I feel the best thing to do here is to talk in concepts that apply to any video editing system



Video Editing

- We tend to have fairly high standards when we watch anything on video
- We expect some standard features in almost everything we watch
 - A title at the beginning
 - A set of "shots" cut together in a nice way to tell a story
 - A fairly high number of shots
 - Transitions between the shots
 - Shots might fade into others
 - Shots might spin into other
 - Shots might cut very simply from one to another in a quick chain



Video Editing

- A soundtrack
 - Involving narration and/or background music
 - Static shots
 - Pictures
 - Chart or graphs
 - Mixed in with the normal video
- Titles or legends on some of the shots to identify people, places and things
- Slow motion or fast motion to change the tempo



Capture

- You can capture all of the footage in a single file on your hard disk
 - A half hour of video footage might consume 10 gigabytes of space.
 - Some operating systems and video editing software packages limit file size to 2 gigabytes
 - Other packages put a 30-minute limit on file size



Shots: Defined

- All of the footage is on your machine
- You want the scene to show the candles on the birthday cake being lit
- This activity is filmed from three angles
- You have three minutes of raw footage



Shots: Defined

- The final movie is to have 15 seconds of the movie devoted to this scene
 - Three shots:
 - A 3-second shot showing a match being lit
 - A 5-second shot showing a close-up of one candle on the cake being lit
 - A 7-second shot of the cake with all the candles lit being carried into the room



Marking IN and OUT Points

- Mark the beginning and end of these three little clips
 - Can move them around as individual units
 - Bond them together into the final scene
- You do this by looking at the raw footage and marking an
 - IN and OUT point
- Then you drag these clips onto the timeline



Timeline

- Arrange the video clips on the timeline
- Place in the order you wish to have them appear on the screen
- You can play them as a sequence



- Video editing is a creative act
 - Editing involves working through a well-established, predictable set of steps
- Video files aren't actually embedded within an editor
 - A link is made between the video project and the file being imported
 - Be careful when moving or removing imported video files
 - The editing software can lose track of the links to the media
 - The link will need to be reestablished



- A basic, rough edits to footage
 - You may edit several long clips into shorter ones
 - Creating more narrowly-defined "in" and "out" points
 - The beginnings and ends of clips
 - Delete imported clips that don't serve the project
- Sequencing
 - This involves dragging clips into the timeline where an order can be established



- It is my opinion that you always edit to the audio
 - This method assumes we have a decent audio track that video can be synced
- Trim editing is often the next step
 - This involves making minor changes to clips
 - Sometimes in isolation
 - A "slip edit," which involves changes to adjacent clips
 - A "roll edit," which involves changing one clip's out point and another's in point



- Some additional post-production steps
 - These involve adding transitions between clips and various kinds of video filters
 - Which change the visual quality of one or more clips
 - When and how filters and transitions are applied can have a significant impact on the tone and texture of a piece
- Titles are often added around this time
 - These include various kinds of on-screen text
 - The "lower thirds" that appear when interviewees are on screen
 - Title screens introducing videos or sections
 - Credit rolls at the end



- Correcting and grading color
 - Grading involves enhancing color
 - Correcting involves fixing color imperfections
- Working with color entails
 - Getting skins tones looking natural
 - Making sure colors match across shots
 - Ensuring the overall color is "balanced"
 - Making sure blacks are truly black
 - Whites are truly white



- Export the video
 - Selecting a codec and container
- Codecs are used to compress video
 - Optimizing large files for downloading and streaming
- Containers package up video and audio streams
 - Adding metadata
 - Extensions
 - mov
 - .mp4



Video Editing Software

- iMovie (Mac OS X)
 - http://www.apple.com/mac/imovie/
- Windows Movie Maker (Windows)
 - http://windows.microsoft.com/en-us/windows-live/moviemaker#t1=overview
- Lightworks (Windows)
 - http://www.lwks.com/
- Avidemux (Windows/Mac/Linux)
 - http://avidemux.sourceforge.net/
- VSDC Free Video Editor
 - http://www.videosoftdev.com/free-video-editor

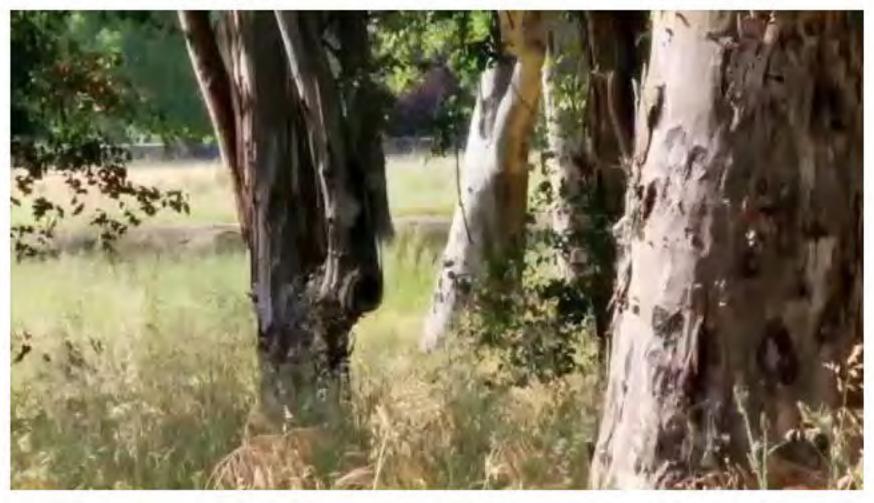
Video Editing Software

- YouTube Video Editor
 - YouTube Editor (Web-based)
- Google Picasa
 - http://picasa.google.com/
- DebugMode Wax
 - http://www.debugmode.com/wax/
- VirtualDub
 - http://www.virtualdub.org/
- Pinnacle VideoSpin
 - http://videospin.en.softonic.com/



SOME EXAMPLES

Viral Videos & Social Media Advertising



http://youtu.be/LJP1DphOWPs

14.2 million hits on YouTube



Real Time, Non-Preprogrammed Production

Power out? No problem. pic.twitter.com/dnQ7pOgC

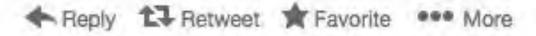
7:48 PM - 3 Feb 2013



Real Time, Non-Preprogrammed Production



We just really don't want football season to end. Can you blame us?





"Yuck!"

A 4th grader's short documentary about school lunch

- To prove to his parents that the school lunches at his NYC elementary school weren't as healthy as they sounded on the Department of Education's lunch calendar, he snuck a camera to school every day to document his lunch
- http://vimeo.com/48406956





 Media, technology and access to the digital world have emerged as areas of great opportunity as digital innovation transforms both our professional and personal lives.

The digital world provides opportunities for us to engage our users

and connect with them.



Digital Storytelling

- The creation of media is democratized
- My advice is:
 - Go forth
 - Create
 - Publish
 - Tell Your Story





Conclusion

DIGITAL Storytelling Let's talk.....



Conclusion

DIGITAL Storytelling

is the marriage of technology and storytelling.

RESOURCES AND LINKS



- https://cc.readytalk.com/cc/s/meetingArchive?eventId=x iwj2vr9hq5v
- https://sites.google.com/site/digitalstorytellingwiththeip ad/
- https://cc.readytalk.com/cc/s/meetingArchive?eventId=t objtvu94p44
- http://cogdogroo.wikispaces.com/StoryTools



- Andrew Stanton: The Clues to a Great Story
 - http://www.ted.com/talks/andrew stanton the clues to a gr eat story.html
- Influence Through Storytelling
 - http://www.slideshare.net/joyce hostyn/influence-throughstorytelling
- Digital Learning Environments
 - http://www.guide2digitallearning.com/tools technologies/100
 digital storytelling tools your digital selves natives part 1
- How to Create Simple Digital Stories
 - http://electronicportfolios.com/digistory/howto.html



- 64 Sites for Digital Storytelling Tools and Information
 - http://fluency21.com/blog/2013/04/03/64-sites-for-digitalstorytelling-tools-and-information/
- Digital Storytelling Cook Book
 - http://static.squarespace.com/static/505a3ab2e4b0f1416c7df6 9a/51684d91e4b0cbd5dcd53757/51684d91e4b0cbd5dcd5375b /1332882649047/cookbook.pdf
 - http://courseweb.lis.illinois.edu/~jevogel2/lis506/howto.html
- Digital storytelling: A tutorial in 10 easy steps
 - http://www.socialbrite.org/2010/07/15/digital-storytelling-atutorial-in-10-easy-steps/
- Digital Storytelling Storyboard
 - http://www.jasonohler.com/pdfs/storyboard_template.pdf



- Free Online Storyboard Editor
 - http://studios.amazon.com/storyteller
- Desktop Application
 - http://www.articulate.com/products/storyline-overview.php
- MindManager
 - http://www.mindjet.com/mindmanager/
- Twine is an open-source tool for telling interactive, nonlinear stories
 - http://twinery.org//
- Free tool that allows you to write audiovisual scripts, plays, comic books and film storyboards
 - https://www.celtx.com/index.html



- Animation Desk™ for iPad Lite Version
 - https://itunes.apple.com/us/app/animation-desk-for-ipadlite/id470899893?mt=8
- Storyboards 3D
 - https://itunes.apple.com/us/app/storyboards-3d/id509496416?mt=8

- Wikimedia Commons Free Media Music Resources
 - John Shoemaker's Legally Reusable Media.
 - Free Music Archive
 - Thefreesoundproject
 - soundsnap

- Opsound
- <u>ccMixter</u>
- Public Domain Music
- Moby
- Jonathon Roberts
- Jimmy G
- DanoSongs
- Musopen

- Copyright continuum
- Digital Storytelling Sites
- Ookaboo
- Pics4Learning, plus other sites
- Our Media
- Creative Commons
- Creative Commons Content Directories
- Wikipedia Media Commons

- Microsoft Office Online
- JISC Collections Digital images in education
- Free Play Music
- <u>Bravenet</u>
- GarageBand
- Free Images
- Free Graphics

- Music, Sounds
 - Free Music
 - Stone Washed
 - Wave Central
 - Stockxpert

- Pictures, graphics
 - Animation Station
 - Background City
 - Free Foto
 - Fresher Image



More Free Photos

- Stock.XCHNG
- Openphoto
- Stockvault.net
- Unprofound
- Free Media Goo
- Morguefile
- Pixel Perfect Digital
- Image*After
- Freerange



More Free Photos

- Free Digital Photos
- Free Photos Bank
- Flickr
- Digital Gallery
- Free Digital Photos
- Public Domain Pictures
- Art history

More Resources

- The iPhone Boom Mic
 - http://photojojo.com/store/awesomeness/iphone-boom-mic/
- Photojojo! Store
 - http://photojojo.com/store/