

Tech Tools to Facilitate Teaching College & Career Readiness

MCAE
2014

Agenda

Technology –
national/state level
– Employer Needs

Anchor Standards

Technology Demos

Small Groups

Wrap Up/Eval

Reading/ELA

Writing

Math

U.S. DOE Tech Plan 2010

“Technology also should be an integral component of teaching methods courses and field experiences rather than treated as a discrete skill distinct from pedagogical application”

An ambitious agenda for transforming teaching and learning through technology. Much of the plan emphasizes “21st century learning,” and competencies that, according to the DOE, include critical thinking, complex problem solving, collaboration, and multimedia communication.

ISTE Position Statement



Digital learning plays a central and substantive role in ensuring all students graduate college and career ready.



Massachusetts Guiding Principles (k-12)

- Mentions the use of technology and the concept of digital literacy for publishing, collaborating, writing and peer editing as part of the Common Core



Technology & College & Career Readiness

- ▶ Technology is mentioned in 78 of the standards (common core)



CCR Anchor Standards

CCR Anchor 7 – Reading

- Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words

CCR Anchor 6 – Writing

- Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others
- Gather relevant information from multiple print **and digital** sources

CCR Anchor 5 – Math

- Use/appropriate tools strategically

CCR Anchor 2 – ELA - Speaking and Listening

- Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

CCR Anchor 5 -

- Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

Shift in the Way We Teach

The Common Core State Standards (CCSS) represent a shift in the way we to ensure that struggling students, including those with disabilities, are college and career ready

The integration of technology resources and tools, linked to best practice can help you personalize instruction

The Medium is The Message

Technology **can** be incorporated into learning just about any skill, and that probably includes all of those mentioned in the standards



“Considerable evidence that reading, writing, and researching via “21st Century Technology” is significantly different from traditional print-based reading, writing, and researching



It is vitally important that students be taught those differences in order to be fluent in both traditional and new Literacies

12 Skills the Common Core AND Employers Want

1. Converse one-on-one

Being able to carry on a conversation is the heart of the first Speaking/Listening anchor standard, SL.CCR.1

2. Present to Groups

Presenting is the fourth Speaking/Listening anchor standard, SL.CCR.4

3. Use visual displays

The fifth Speaking/Listening anchor standard, SL.CCR.5, deals with strategically using visual displays



Skills 4-6



4. Write well

Writing widely and routinely is the 10th Common Core anchor standard in writing, and writing appropriately for a given context is the heart of W.CCR.4

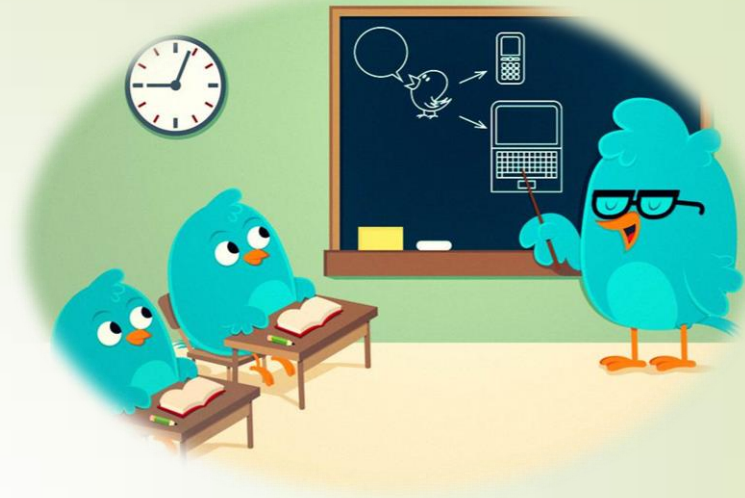
5. Edit and proof

The ability to edit writing is part of the fifth writing anchor standard, W.CCR.5

6. Use Word-Processing Tools

Common Core has garnered some controversy for its keyboarding requirements, but they, as well as the tech-based writing anchor standard, W.CCR.6

Skills 7-9



7. Master online communications

Mastering online communications is part of W.CCR.6.

8. Gather information

Refers to research threads of the Common Core, most notably the 7th reading anchor standard (R.CCR.7) and the 7th, 8th, and 9th writing anchor standards: W.CCR.7, W.CCR.8, and W.CCR.9.

9. Search the web

This skill is the heart of R.CCR.7 and W.CCR.8.

Skills 10-12



10. Detect nonsense

Be able to evaluate the validity of arguments (R.CCR.8), assess the credibility of sources (W.CCR.8), and evaluating a speaker for BS (SL.CCR.3)

11. Pay attention to detail

Attention to detail - built through skills like close reading (R.CCR.1), editing & revising (W.CCR.5), & mastering sentence- & word-level conventions (L.CCR.1 & L.CCR.2)

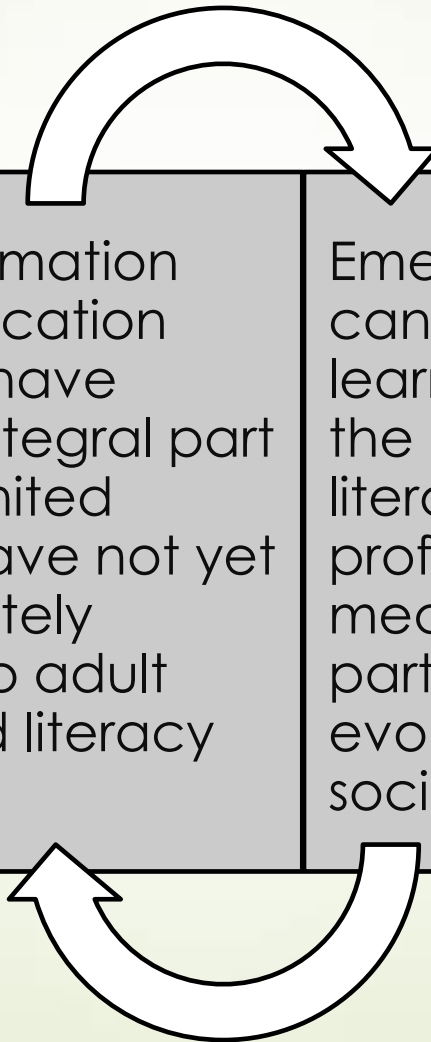
12. Master in-depth knowledge of any field

in its introductory matter, one skill that typifies a college/career-ready person is that they "build strong content knowledge."

Emerging Tech for Adult Literacy and Language Education

Although information and communication technologies have become an integral part of life in the United States, they have not yet been adequately integrated into adult language and literacy programs

Emerging technologies can help diverse adult learners to develop both the language and literacy skills and the proficiency with new media required to fully participate in a rapidly evolving information society



Multimodal

Linguistics, visual, audio, gestural, spatial

Newer technologies make more possible

Types of meaning-making now gaining ascendancy in business and other environments

Helping students develop a critical approach to media (through producing it themselves)

Empowering students to create products culturally and socially relevant to their lives

Tech Tools – Reading/ELA





MULTIMEDIA SUPPORTS FOR READING

- Text-to-speech
- Voice recognition
- Animation
- Embedded dictionaries
- Linked videos
- Study tools such as highlighters and annotation capabilities

▶ Video is the New Document (But...)

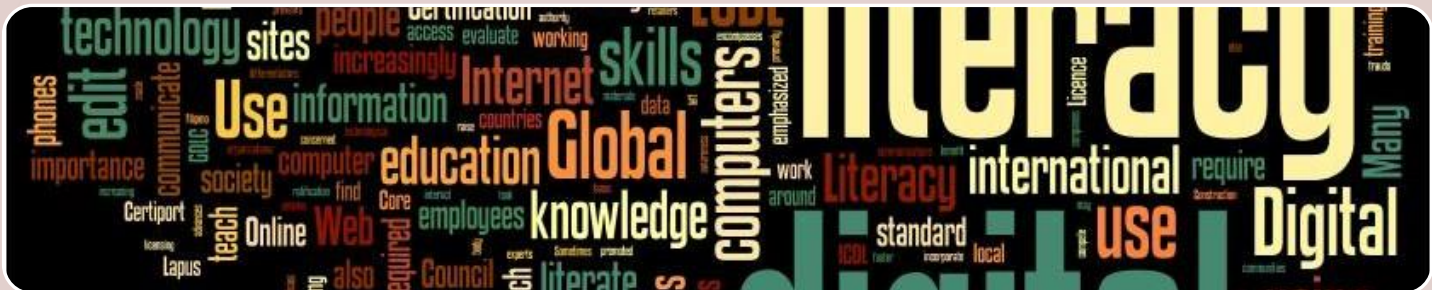
- ▶ Video is becoming a preferred channel of communication
 - ▶ Internet video accounts for 40% of all internet traffic in 2012
 - ▶ By 2016, it is expected that number will jump to 62%
 - ▶ Video helps students become actively engaged in their learning
 - ▶ Video helps maximize school resources
 - ▶ It increases engagement and excitement among students
 - ▶ Video can help facilitate collaboration
 - ▶ Video is appropriate for various learning styles
 - ▶ It helps improve learning outcomes
- ▶ 68% of teachers believe that video content helps stimulate discussions
 - ▶ 66% believe it helps increase student motivation
 - ▶ 55% believe that it helps teachers be more creative
 - ▶ 62% believe that it helps teachers be more effective
 - ▶ 91% of UMASS students felt that using lecture capture helped them learn course material
 - ▶ 44% of high school students in a study scored higher on their exams when material was presented in video format
 - ▶ SNU Videos/text reading

THE EVOLUTION OF CONTENT



	Prehistory	1400s	1900s	1970s	1990s	2000s	2010s
Media	Stone	Paper	Print	Word processing	Web	Social	Video
What it enabled	Recorded history	Communicate over time and distance	Communicate with a mass audience	Content to a global audience	Near-instant communication	24 / 7 communication	Impactful and complex communication
Innovation	Symbols with shared meaning	Written language	Physical publishing	Electronic publishing	Digital creation and publishing	Real-time	Near-reality
Challenge to overcome	Not at all portable	Only one copy	Difficult to edit	Connectivity	Information overload	Always on	Transparent

Diverse Media



Presenting information in multiple ways can help address the diverse needs of learners in the classroom and engage students on multiple levels.



Using Multimedia to Support Reading Instruction

Captioning to Support Literacy

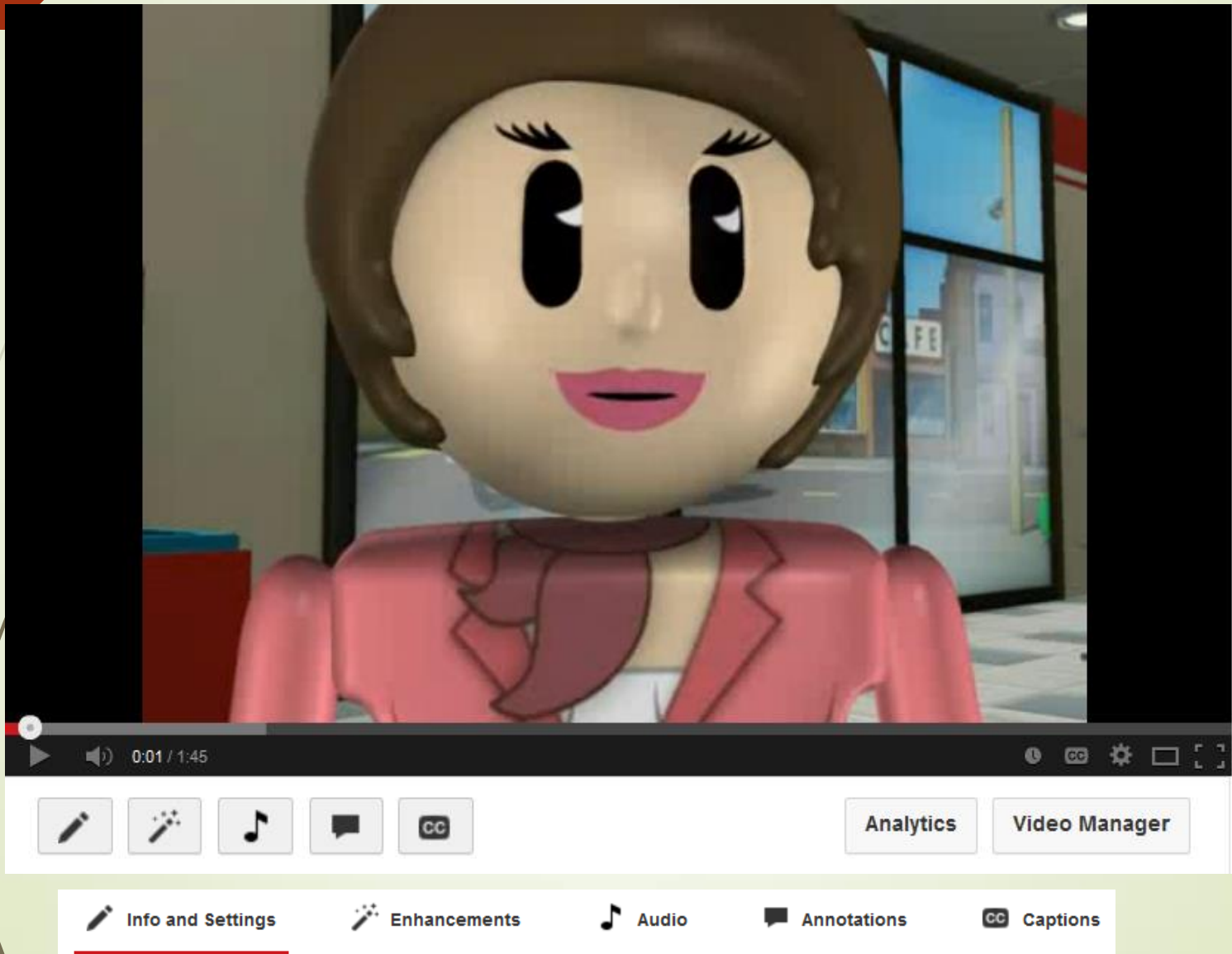
Captions can provide struggling readers with additional print exposure, improving foundational reading skills

Captions

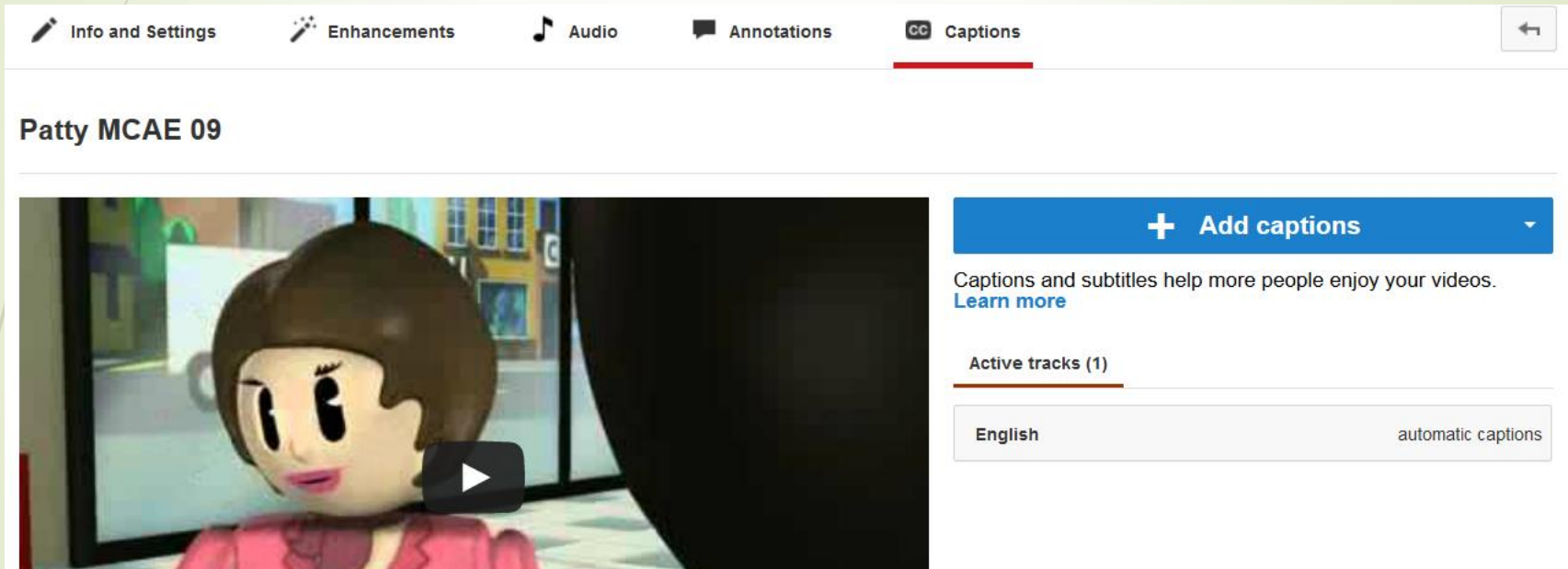


Your Own Videos

24



Edit Automatic Captions



The screenshot displays the YouTube video editing interface, specifically the 'Captions' tab. The video title is 'Patty MCAE 09'. The video player shows a character with brown hair and a pink top. The interface includes a navigation bar with options: Info and Settings, Enhancements, Audio, Annotations, and Captions (which is selected). A blue button labeled '+ Add captions' is visible, along with a dropdown menu showing 'English' and 'automatic captions'. Below the button, there is a section titled 'Active tracks (1)' with a red underline, containing the 'English' track.

Info and Settings Enhancements Audio Annotations **CC Captions**

Patty MCAE 09

+ Add captions

Captions and subtitles help more people enjoy your videos.
[Learn more](#)

Active tracks (1)

English automatic captions

Transcription

YouTube Captions and Subtitles



YouTube Spotlight · 187 videos

Subscribed

1,499,062

1,344 291

Like

Add to Streamus

About

Share

Add to

Transcript



Google Voice

- ▶ Google Voice will automatically transcribe your voicemail messages to text, allowing you to read your voicemail and search through past voicemails.



Captioning Music/News

<http://beatleslyrics.webs.com/>

<http://lybio.net/> (music, news, trending topics)

<http://www.thiagi.com/interactive-lectures.html>



Lybio



Making Videos Interactive



Annotations

There are five different types of annotations to choose from: **Speech bubble**: for creating pop-up speech bubbles with text.

Spotlight: for highlighting areas in a video; when the user moves the mouse over these areas the text you enter will appear.

Note: for creating pop-up boxes containing text.

Title: for creating a text overlay to title your video.

Label: for creating a label to call out and name a specific part of your video.

Audio Apps

“The greatest potential use of this is in English-language learning programs”

www.ESLpod.com

Mobile devices can help students who have trouble communicating orally by allowing them to converse using pictures and the written word

Don't Forget - Apps/Mobile

With the inclusion of video recording functions in most mobile devices recording video has been greatly simplified, and many students use these devices to record evidence of learning and to support critical reflection and analysis.

Small Groups Discussions

34

Reading

What resources do you or might you use to “Integrate and evaluate content presented in diverse media and formats?”

Share a resource with your group

What role could captioning play in your instruction?

Writing

What resources do you or might you use to get students producing writing, publishing, interacting, and collaborating online?

Share a resource with your group

Math

How would you use these or other math tools strategically?

ELA

What resources do you or might you use to “Integrate and evaluate information presented in diverse media and formats?”

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

How might you use interactive videos in your teaching?