



**Journal of
Interactive Media
in Education**

JIME <http://jime.open.ac.uk/2013/02>

Exploring Curation as a Core Competency in Digital and Media Literacy Education

Paul Mihailidis

Department of Marketing Communication, Emerson College, United States

paul_mihailidis@emerson.edu

James N Cohen

School of Communication, Hofstra University, United States

James.Cohen@hofstra.edu

Abstract: In today's hypermedia landscape, youth and young adults are increasingly using social media platforms, online aggregators and mobile applications for daily information use. Communication educators, armed with a host of free, easy-to-use online tools, have the ability to create dynamic approaches to teaching and learning about information and communication flow online. In this paper we explore the concept of curation as a student- and creation-driven pedagogical tool to enhance digital and media literacy education. We present a theoretical justification for curation and present six key ways that curation can be used to teach about critical thinking, analysis and expression online. We utilize a case study of the digital curation platform *Storify* to explore how curation works in the classroom, and present a framework that integrates curation pedagogy into core media literacy education learning outcomes.

Keywords: Media Literacy, Curation, Civic Engagement, Digital Learning

Introduction

In today's hypermedia landscape, youth and young adults are increasingly using social media platforms, online aggregators and mobile applications for daily information use. A 2010 Kaiser Family Foundation study found that 'Eight- to eighteen-year-olds spend more time with media than in any other activity besides (maybe) sleeping-an average of more than 7½ hours a day, 7 days a week.' The Pew Research Center's Project for Excellence in Journalism Center's (2012) annual State of the Media report found information consumption habits migrating significantly towards digital platforms. In this context, how students learn to be analytical, inquiring, and critical thinkers encompasses a new set of pedagogical approaches.

In her book *Digital and Media Literacy* (2011), Renee Hobbs stresses the competencies needed to prepare students for lives of constant technological evolution. She finds it ever more necessary for students of a digital age to

harness human curiosity, the ability to listen, and seek diverse knowledge in the context of integrated information spaces, constant sharing, public identities, and low barriers to production (Hobbs 2011). One of the largest impacts of the Internet today is in the integration of various information types (news, entertainment, personal communication) and mediums (television, radio, print) into aggregated spaces. Search engines and social networks have replaced specific channels, shows, and even web sites as the predominant places youth go for information. Many-to-many communication platforms that allow for the large-scale reach of media messages have cultivated a vast information landscape that lacks basic organizational structure.

The result is that students not only have access to seemingly endless amounts of information, but also personalize content and reorganize it in a fashion that best allows them to make sense of a topic, and to share it with peers (Lessig 2008). Teachers at all levels of education must be prepared to negotiate the digital realities of their students as they design learning experiences around critical inquiry, analysis, and evaluation. Indeed, educators today have a certain responsibility to focus student skills and experiences in an exercise of participation with the surrounding media (Jenkins et al. 2009).

This paper explores the concept of curation as a pedagogical tool to embolden critical inquiry and engagement in a digital age. Specifically, the online digital curation tool *Storify* is utilized to present a theoretical justification for using curation to increase digital and media literacy, and six practical applications for curation pedagogy to teach about critical thinking, analysis, and engagement online. *Storify* allows for a student-driven, creation-driven and multimedia-driven approach to learning that enables students to engage and participate directly with multimedia content. This paper seeks to encourage instructors, particularly on secondary and tertiary education levels, to bridge the gap between informal learning outside of the classroom with formal learning to create a more dynamic place for students to advance critical inquiry, dialogue, and engagement through new forms of content creation, curation, and dissemination.

Why curation?

In his seminal white paper on participatory culture, media education scholar Henry Jenkins explored the capacity of new media technologies to facilitate critical inquiry, active exploration and vibrant dialog online. Wrote Jenkins et al. (2009):

"Participatory culture is emerging as the culture absorbs and responds to the explosion of new media technologies that make it possible for average consumers to archive, annotate, appropriate, and recirculate media content in powerful new ways. A focus on expanding access to new technologies carries us only so far if we do not also foster the skills and cultural knowledge necessary to deploy those tools toward our own ends" (p8).

Jenkins highlights the type of online activities that participatory spaces enable- *archive, annotate, appropriate and recirculate*-which occur in real time and in the context of abundant information flow. The habits that participatory technologies facilitate also offer a range of opportunities to facilitate more savvy information navigation, curation and appropriation. Jenkins (2006) identified a core set of key skills that "build on the foundation of traditional literacy, research skills, technical skills, and critical analysis skills taught in the classroom." (p4). The identified skills- *play, performance, simulation, appropriation, multitasking, distributed cognition, collective intelligence, judgment, transmedia navigation, networking, and negotiation* - have at their core the ability to engage multimodal inquiry, multimedia platforms, and

information abundance through curation.

The word curate derives from the Latin root *Curare*, or 'to cure.' To curate, historically, has meant to take charge of or organize, to pull together, sift through, select for presentation, to heal and *to preserve*. Traditionally reserved for those who worked with physical materials in museum or library settings, curation today has evolved to apply to what we are all doing online. The preservation and organization of content online is now largely the responsibility of the individual in highly personalized information spaces. This has created a need to understand how individuals choose to pull together, sift through, organize, and present information within these spaces. Sharing, appropriation, and peer-to-peer collaboration are at the centre of what scholar Clay Shirky (2010) sees as the new communication dynamic that digital technologies have enabled:

"...the use of a social technology is much less determined by the tool itself; when we use a network, the most important asset we get is access to one another. We want to be connected to one another, a desire that the social surrogate of television deflects, but one that our use of social media actually engages" (p14).

Across all levels of education today, students enter the classroom with a certain level of familiarity with digital tools and platforms (Prensky, 2001; Ofcom, 2010; Rosen, 2010). The notion that this familiarity translates to a heightened level of technological competence has been contested at all levels of education (Hargittai, 2005; Jones et al., 2010; Kennedy et al., 2008). Nevertheless, the increasing use of digital platforms and tools necessarily calls for a re-examination of the validity of teaching about critical thinking, investigation, and analysis through traditional models of paper writing and examinations where research material is largely re-presented in different ways. Recent investigations into youth and literacies in education have shown that proper pedagogical methods that approach critical inquiry online, knowledge construction, reliability and savvy web navigation can increase digital and media literacy (Kuiper & Volman, 2008; Sanchez et al., 2006; Taboada & Guthrie, 2006). While traditional techniques remain relevant for students today, there is a need to explore pedagogical models that aim to empower critical thinking *within the context of digital realities for youth today*.

To help orient pedagogical approaches for teaching curation in the classroom, below are three specific context points for media educators to consider in integrating new approaches to teaching about critical inquiry and analysis online. These approaches, while applicable across all education levels, are here written primarily for secondary and tertiary level education.

Curation as new media organization

The earliest versions of the browser-based web relied on users to search for content based on interest utilizing known keywords. The early web was constructed with traditional paper media in mind and information providers have historically been responsible for the process of organizing data. With the progress of broadband, code advancement and databases, the web's users processed information into categories that organized all existing words into subject categories. In a social media environment, the information consumer is the provider.

As information is disseminated and content on the Internet expands exponentially, organizational tools are a necessity. A search online may result in valuable discovery, but the same search days later may present completely different results. Digital aggregators were created for web users in order to organize online content. *Delicious*, an early online bookmarking system,

provided a way to aggregate online discoveries into one place. One of the advanced features of the system was the ability for the user to reorganize content with their own category designations. This is the process known as tagging, when used with a hash mark (#), it is hashtagging. Tags work as a way for people to not only remember but to *re-find* pages on the web (Weinberger 2007).

From tags emerged the personal *feed*, where users aggregated content into distinct interests that updated as information was added to the web. The practice of organizing content may result in personal value for the individual, but also allows for social value to manifest later (Shirky 2008). Shirky explained that the use of Flickr during the 2005 London Transport bombings contained immediate value. Because traditional media could not update photographs or news quickly after the incident, people already in the transport system used the Flickr service to upload pictures of the aftermath. Many news sources - as well as victims' families - used the service to gain more information (Shirky 2008).

Where information was once filtered through hierarchical systems, the average consumer had to wait until information was supplied to them. The access to advancing communication technologies encourages users, especially students, to promote education, democratic self-expression, and social progress (Kellner and Share, 2007). Access to more information from direct sources adds the responsibility of participation with media and requires savvy media engagement to consider how images and real-time information coordinate.

As the Internet continues to develop technologically, so have organizational tools for the user experience. Today, students have accounts in a multitude of platforms where they *organize* information. From restaurant and movie reviews to banking, travel and shopping, the web now mandates curation as a default for users navigating its exponential content. Organization is no longer simply for daily routines, pastimes or hobbies, but also for news and current affairs. As a result, news organizations have adjusted their daily routines to the logic of the web, integrating social media platforms, hypertext, video streams, and segmentation to better interact with audiences (Tewksbury and Wittenberg 2012).

From bookmarks and aggregators to Twitter lists and Facebook groups, investigation into all topics involves the user deciding what to keep, what to discard, who to trust, what is credible, and why. Within this new user-centric landscape negotiations around control and autonomy of how information is organized still exist. Through the abundance of information online, there are more valuable, trustworthy journalism and information experts, but also the possibility of collecting mistakes, mistruths, and misinformation (Bartlett and Miller 2011). Social networks and search engines like Facebook, Twitter, and Google do ultimately play a significant role in the organizational capacity of information on their platforms. From design to algorithm, the Internet reproduces some of the age-old power struggles dealing with access to information, control of content, and the relationship between distribution and reception (Morozov 2011). Within this context, however, the user now has more flexibility to interact with, shape, self-organize, and curate abundant amounts of information.

Curation as value-added

While the web offers a host of tools for organizing content, it has recently evolved to allow for the mixing of social, professional, and civic information. Social media platforms seamlessly integrate peer-to-peer and user driven content with top-down organizational news and information. As social spaces, they have also made sharing their default mechanism.

Twitter, the microblogging site, was the first social media to employ an organization tactic that encouraged curation as value-added. In 2009, Twitter added the "list" feature to the site allowing users to curate fellow Twitter users into organized feeds. The move was considered an act of exclusivity by *Business Week's* David Armano, who explained that users should come to terms with 'getting value out of our networks - while filtering out the clutter' (Armano 2009). The beginning of lists encouraged users to consider the value of the information online in a more purposeful manner by categorizing their content streams for specific purposes. When the lists are public, the user becomes a de facto expert in showing the value placed on certain sources, organizations, and individuals over others. This type of curation "allows the people formerly known as the audience to create value for one another every day" (Shirky 2010, 17).

Following suit, YouTube, the largest video sharing service in the world, undertook a complete redesign of its site, allowing the user to have more control over the 60 hours of content uploaded to the site every minute. Lev Grossman (2010) explained that the user could compete with networks by simply curating and organizing content - often better than a network can. Facebook recently integrated *Interest Lists* into its platform, which allows the user to curate pages, friends, thought leaders, and public notes into an interest list that can be shared with other users (Constine 2012). This function is a result of Facebook's expansion into a more diverse and inclusive information repository.

Social networks, born as spaces for dialog and conversation, have grown into ubiquitous information exchanges. Youth today refer to social networks, aggregators, and mobile apps for all information habits, instead of siloing out specific media for news, politics, personal communication and leisure. In turn, social networks have provided new functions that help users curate information in meaningful and productive ways.

Curation as digital and media literacy

Curation is an act of problem solving. Curating information to tell a story creates a sense of responsibility for the curator. Storytelling advances the core media literacy principles of analysis, evaluation and creation. By curating, students can compose a story using content acquired on their search with heightened awareness of purpose and audience (Hobbs 2010). All media online is searchable by any user of the web, but the task of the curator is to organize the information into a story in order to share with others in a coherent, nuanced and clear manner. Guided by the teacher, students can access content, analyze and evaluate the messages, create presentations, reflect on findings, and work together in collaborative environments (Hobbs 2010).

Technology in an educational environment has primarily been utilized as a way to enhance the facilitation of classroom presentation and organization. Less has it been structured around meaningful integration with pedagogies for empowering critical agency for the digital future. Curation as digital media literacy, in this sense, can both inspire agency around critical analysis of information as it pertains to the individual (Erstad et al. 2007) but also as it relates to critical inquiry about hegemonic structures in participatory democracy, and about critical skills to combat passivity, groupthink, and the spiral of silence (Kellner and Share 2007).

Students fluent in online tools tend to use technologies for more and different purposes than required for the classroom (Jones et al. 2010). Bartlett and Miller (2011) found that students are often vulnerable to overconfidence in their web use and have too much blind trust in the general web. The fast and vast nature of the Internet often leads to uncritical consumption and the choice of aesthetically pleasing sites over quality content (Kiili & Mattunen 2008). These

habits, if not contested in the classroom, stand to accelerate careless and uncritical information uses and habits.

To help mitigate blind trust and uncritical consumption in the web, Kellner and Share (2005) present a model for critical media literacy predicated on *non-transparency, codes and conventions, audience decoding, content and message, and motivation* (374-377). Critical media literacy, in this context is utilized to combat the hegemonic power structures in society by training students to become critical thinkers, thereby transferring power from the hands of the distributors to the hands of the receivers. This line of inquiry grew from the work of the New London group (1996) who proposed a pedagogy of multiliteracies to promote educational strategies that account for the diverse set of cultural traits that societies encompass, and to help cope with the fast paced growth and evolution of new media technologies, social platforms, and mobile media. Scholars (Kellner 1998, 2004; Luke and Freebody 1997; Buckingham 1994; Tisdell, 2008) promoted such thinking in response to media landscapes that no longer fit into direct hegemonic structures.

More recently, discussions around critical media literacy have been situated in more participatory and active approaches to media education. Beyond Jenkins et al. (2009) white paper, studies have shown that increased levels of Internet literacy, digital competence and goal-oriented online learning can lead to enhanced quality and analysis in time online (Kahne et al. 2012; Rheingold 2008;). Mimi Ito, in *Living and Learning with New Media* (2009) , writes of the friction between participatory youth and traditional education institutions:

"Erecting barriers to participation deprives teens of access to these forms of learning. Participation in the digital age means more than being able to access serious online information and culture. Youth could benefit from educators being more open to forms of experimentation and social exploration that are generally not characteristic of educational institutions." (p2).

Participatory approaches to media literacy both combat the new evolving hegemonic structures that youth now reside in—from Google to Facebook, Twitter, and the like—and directly relate to the new ideas of civic engagement put forth by Dalton (2009), Loader (2007), Dahlgren (2012), and Bennett (2008). These scholars eschew traditional notions of duty-based citizenship (voting, taxes and military duty) and promote engagement-based notions of citizenship (volunteering, advocacy, expression, protest) (Dalton, 2009). Participation is at the core of this engagement, and learning must incorporate such participatory and holistic approaches to reflect this new civic environment (Dahlgren 2012).

Curation, as a critical media literacy skill in a digital and participatory context, can work on a micro-level to teach about bias, manipulation, frames, and agendas through student-driven storytelling; and also on a macro-level to teach about how information creation, distribution and reception help empower healthy civic engagement in participatory democracy. Below are pedagogical approaches to curation predicated on harnessing the technological capabilities of social media for teaching and learning about critical analysis, and expression online.

Storify and pedagogical approaches to teaching curation in the classroom

An abundance of free, easy-to-use, and well-designed curation tools exist on the web today. Facebook, Twitter, YouTube, Prezi, Pinterest, Storiful, Amplify, and Scoop, to name a few, allow users to control their information behaviors across all content types and media formats. These tools are organized for fluid

user control, default sharing, and personalization. One tool in particular, *Storify*, enables the curation of all information types from the web to stream into a single story platform.

Launched in April 2011, Storify is online software that "helps its users tell stories by curating social media" (storify.com/about). Storify allows for organizing information on the web as well as facilitating access to social media outlets like Facebook, Twitter, Flickr, YouTube, Tumblr, and external links. It contains its own search functions and allows for seamless drag and drop into the Storify timeline. Storify also allows for the insertion of text boxes within the story, so that users can provide direction, narrative, scope, justification, and context for their curated story.

Figure 1: Storify Curation Platform

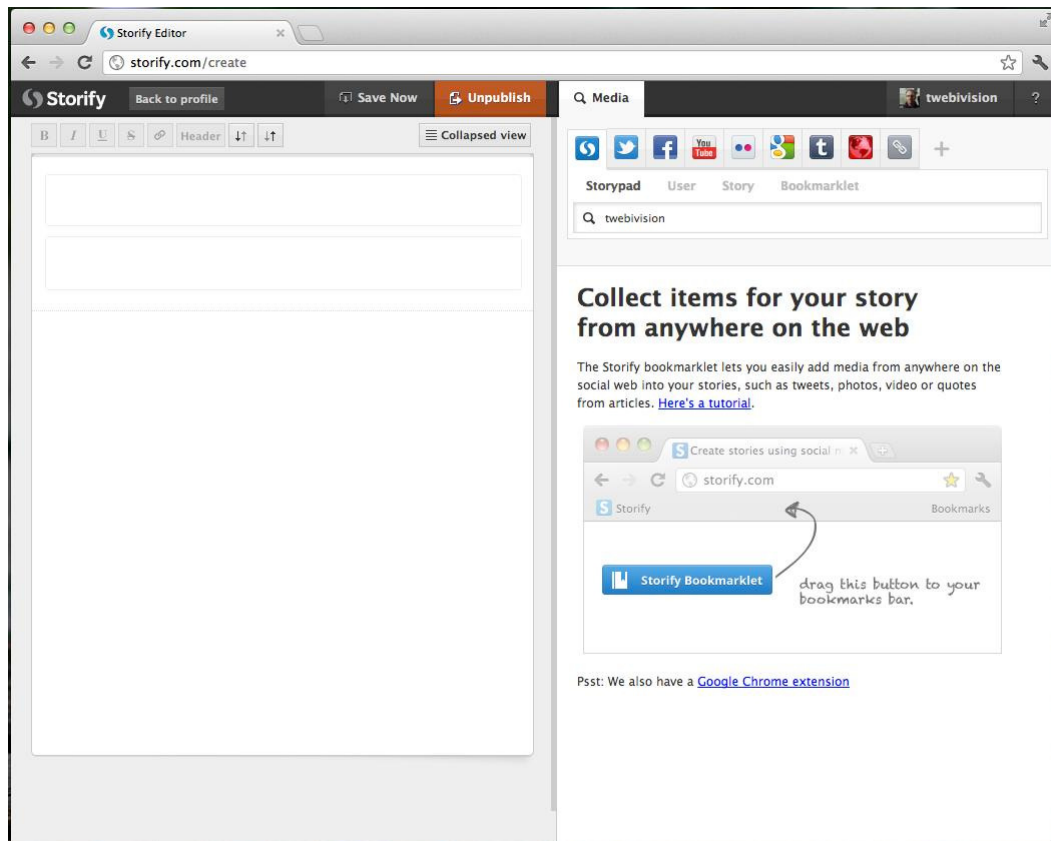
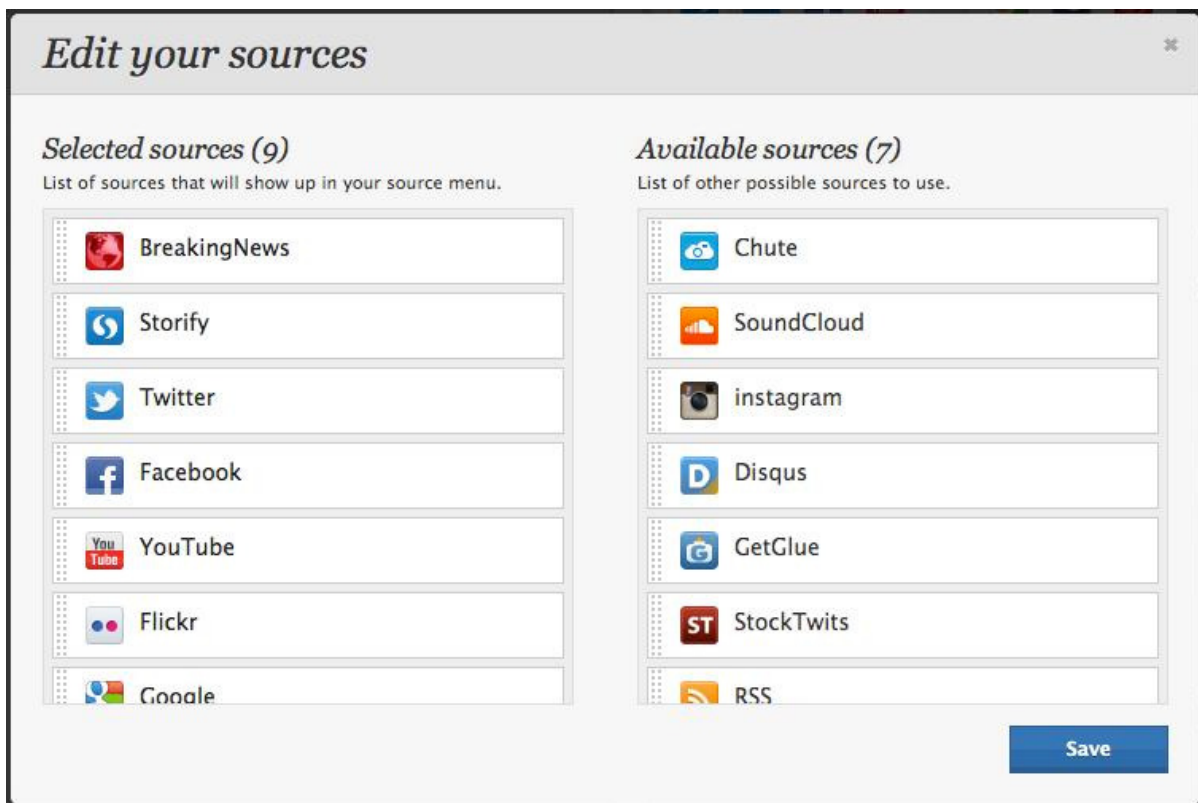


Figure 2: Integrated Source Dashboard



The pedagogical implications for media educators here are great. Because of the tool's simple and dynamic layout, and because of its integration of infinite content sources from the web, it can be an efficient tool for teaching about multimedia consumption, intertextual analysis, framing and perspective, agenda setting and bias, sources, voices, and credibility online (Leu et al. 2011). Further, classrooms that can seamlessly blend learning around engaging tools and media habits that students use daily outside of the classroom within a formal setting stand to better engage a generation of digital learners.

Below we have identified six key teaching points for using Storify in the classroom that are student-driven, creation-driven and curation-driven, and that allow students and teachers to collectively explore critical inquiry and multimedia storytelling in digital spaces. The teaching points are applicable to teachers at all levels of education, but in this context specifically tailored for secondary and tertiary educators across all disciplines. Curation, however, can extend down into early childhood educational technologies as well as to lifelong learners negotiating the fast-paced new digital media environment. Storify places the responsibility of composing and creating a story, in real-time, from the depths of the Internet, in the hands of the students; shifting the educational framework from *read, write and react*, to *create, curate, and contemplate*.

Teaching point #1 - Where top down and bottom up meet

In a very simple and straightforward manner, Storify allows the integration of content from established news and media outlets with content from peer-to-peer social platforms. This integration of voices mirrors the way young adults today are exposed to a story: often through a combination of peer-to-peer networks and top-down media organizations.

In our classrooms, students are asked to create a series of curated stories that recap, for example, the Kony 2012 viral video sensation created by the non-profit *Invisible Children*. In one curation, students are told they can only

employ true journalistic sources. In the next iteration of the curation, students can integrate content from social networks, blogs, or peer-to-peer dialog online. Their goal in both Storify curations is to retell the story as accurately as possible; pulling together as many sources, viewpoints, and angles as they can.

Figure 3a: Kony Curation Project Reports

The screenshot shows a web browser window with the URL storify.com/create. The page title is "Kony 2012 Reports". The main content area on the left contains a video player for "KONY 2012" by invisiblechildreninc, dated Mon, Mar 05 2012 15:13:33. Below the video, there is a text block stating "The video garnered almost 80 million views in a week and gained massive media attention." There are also two social media-style posts: one from Nicholas Kristof on Twitter dated Thu, Mar 08 2012 17:22:28, and a link to "Kony 2012 | World news | The Guardian" dated Latest news and comment on Kony 2012 from guardian.co.uk. At the bottom left, there is a section titled "Videos on the web" with a small video thumbnail and text: "Where pop music, yawning cats or finger-biting infants generally rule, it was instead 'Kony 2012', a half-hour video about an".

On the right side, there is a "Media" search bar with the query "kony 2012" and 7 results. The results list several news articles:

- Central African churches aid victims of warlord Joseph Kony**
Kony was thrust into the limelight by the film Kony 2012, made by a US nonprofit called Invisible Children Inc., which said it sought to ...
christiancentury.org · Mon, Jun 11 2012 11:53:06
- UN reports on Ugandan warlord's crimes against children**
Between July 2009 and February 2012, Kony's group kidnapped at least 591 children – 268 girls and 323 boys – mostly in the Democratic...
reuters.com · Wed, Jun 06 2012 17:35:29
- Alexandria Central School class leaders**
She organized a benefit concert in which students performed to raise money for the Kony 2012/Invisible Children Foundation and recently w...
watertowndailytimes.com · Tue, Jun 12 2012 05:10:54
- Reflections from the African Land Forces Summit**
By Lawrence J. Korb | June 12, 2012 Although I have traveled all around the world, including visits to all seven continents, until recent...
americanprogress.org · Tue, Jun 12 2012 11:26:09
- Kony rebels still abducting 100s of kids**
A UN report on the LRA said it had information on 45 children killed and maimed during attacks by Kony's rebels between July 2009 and...
mmegi.bw · Fri, Jun 08 2012 10:53:16
- The Harbinger: KONY 2012**
KONY 2012! Anyone remember that? I do, from seventh grade when my best friend did a presentation about it. On March 5 th , an organizatio...
my.hsj.org · Wed, May 30 2012 17:46:15
- The Shoreline: Kony 2012: The Criticism**
Invisible Children, Inc., the corporation designed to stop Kony and rehabilitate the refugees from his army, has launched a video titled,...
- my.hsj.org · Tue, May 22 2012 12:16:26

At the bottom of the media results, there is a button that says "Show more results".

Figure 3b: Kony Curation Project Voices

The screenshot shows a Storify page titled "Kony 2012 - Voices". The main content area contains a large red graphic with the text "OUR LIBERTY IS BOUND TOGETHER" above a funnel shape and "KONY 2012" below it. The page is populated with various social media posts, including tweets and Facebook comments, all related to the Kony 2012 video. The interface includes a search bar, navigation tabs, and a list of 20 results on the right side.

The implications of this type of scaffold-driven pedagogy are not only that students must struggle to define and build accurate recaps of a large and complex story, but also that they engage with the integration of the amateur voice in the storytelling process. From this, a series of key reflection questions arise:

- When is a story complete online?
- What does authority mean in storytelling?
- How are mainstream media reports different from peer-to-peer reports?
- Can social media be effective in helping to tell a story?
- How many different voices are needed for a story to be deemed complete?
- How do social media enhance a story? What do they take away?

Storify allows these questions to be explored in the context of student-centered creations that reframe everyday web activity to focus on critical inquiry. Having students create stories that negotiate traditionally "professional" sources within the hypermedia infosphere forces them to actively reflect on the media environment they use for a majority of their information habits.

Teaching point #2 - Integrating mediums, messages, platforms

It is no secret that today traditional formats for reading media are changing. No longer are students reading single information sources in linear formats from start to end. Instead, they are reading opening paragraphs, watching videos, scrolling through images, tweets, texts, and posts. Scholars have increasingly pointed out the lack of attention span the human mind can now devote to any single linear text for long periods of time. (Carr 2010; Rosen 2012). Increasingly, news organizations like the *New York Times*, *BBC*, *ESPN*, *CNN*, and *Politico*, to name a few, are integrating more multimedia content into their stories, allowing readers to simultaneously interact with content in a myriad of ways.

In our classrooms, Storify becomes a tool to teach both about the benefits and limitations of certain media delivery formats and platforms, and about curating multimedia stories that offer audiences an interactive and in-depth experience. In exploring the Arab Uprising, for example, we ask students to create stories entirely by video, images, or text. We then facilitate discussions explaining what advantages and disadvantages each format has for the depth of the story as well as the value for audiences in today's digital information landscape. We use that discussion to ask students to create an integrated and interactive story. They must combine print, video, and audio sources strategically to help sort through an issue with many different angles, viewpoints, audiences and sources. This type of curation allows students to think about how integrating platforms and formats can lead to depth, accuracy, and balance while remaining engaging, interactive, and thorough.

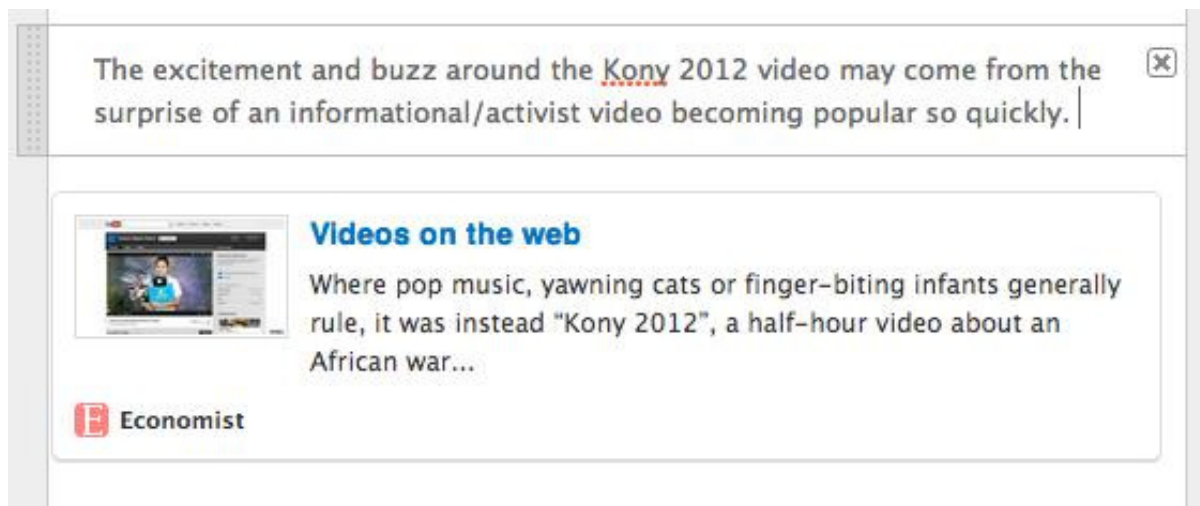
Teaching point #3 - Sources, voices, and credibility online

Credible information online is a constantly changing notion that educators must account for in today's classroom. Digital technologies and Internet search algorithms have supplanted the traditional top-down structures of information verification and flow. In the past, teaching about sources involved to a large extent trusting certain organizations and bodies based on their established reputation and industry expertise. Today, with the popularity of Wikipedia and social technologies that integrate organizational and individual information, defining sources and credibility becomes an ongoing and nuanced conversation.

In the classroom, this raises many important questions: How do we vet online information for accuracy? What is an Internet source for credible information? Can credible sources exist on Facebook, Twitter, and blogs? How do different sources online change the intent and purpose of the message? How do citizen journalists impact coverage of breaking news?

Storify allows students to build 'credibility markers' via a meta-narrative between sources, where they can discuss choice of a source, rationale for the inclusion of that source, and the ability to curate a story that incorporates professional, public, and personal sources. In teaching about the coverage of gay rights, gun control, or other hot-button political issues, we ask students to justify their sources using text reflection boxes within their Storify to create layers of meaningful construction and reflection.

Figure 4: Storify Text Box Integration Function



When students develop a credible list of professional and personal sources around an issue and/or event, they must acknowledge how much subjective weight they place on a tweet, a blog, or a Facebook post and in relative comparison to an advocacy group, cable television operation, or news service. Arguing for the credibility of a myriad of voices online forces students to build valuable justifications for what they choose to believe, and why.

Teaching point #4 - Framing, bias, agenda and perspective

Building directly from Teaching Point #3, framing, bias, agenda and perspective carry the discussion to the next level of understanding how information and audiences sway the meaning of stories in significant ways. The Occupy Wall Street movement serves as a great example to explore and create perspective on how a grassroots civic movement is seen locally, nationally, and globally; by supporters, detractors, and neutral observers; on social networks and in the mainstream press; and in civic, social, economic, and political contexts.

We ask students to curate as many frames as possible about the Occupy movement, comparing the depth of the frames, the bias inherent in certain messages, and how certain frames are positioned versus others. Students explore agendas of certain stakeholders, and collectively show how media bias can alter the perspective and scope of the issue. Students utilize narrative text boxes to point out these discrepancies and insert definitions of framing, priming, and agenda-setting or other communication/media theories into their Storify. This allows theory to blend with practice, all in the context of students curating real content to make these connections, and to address pertinent questions, such as:

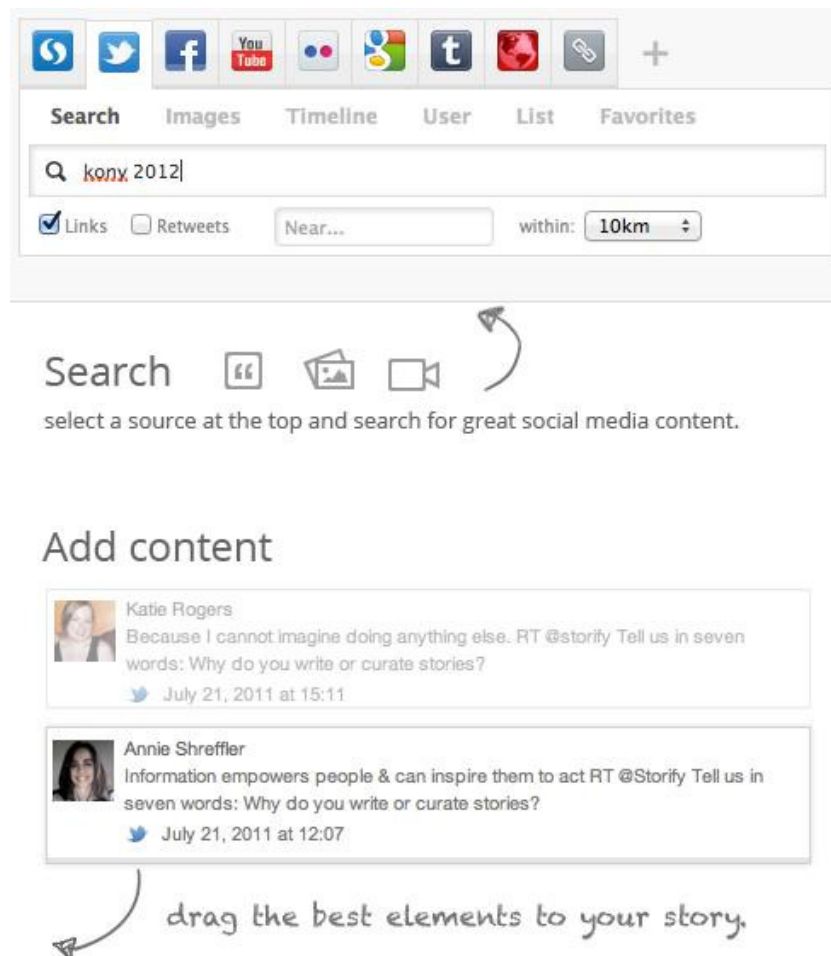
- What agendas are at play in this issue?
- What values are being portrayed?
- How do different parties frame the issue?
- What biases are inherent in all storytelling?
- What choices did you have to make in creating your own frame?

Teaching point #5 - Appreciating diversity

Beyond teaching about message production, dissemination and reception, curation also provides the opportunity to appreciate the diversity of voices online. At no point in the past has the individual had the extent of control and reach over their information habits as they do today. To take advantage of this abundant information landscape, media educators must teach students to appreciate the amount of responsibility and control they have over their

information diets. This includes both consuming messages and creating them. Learning how to curate large amounts of information helps students understand what types of diverse information can be found about an issue online and what collaborative dynamics stories adopt through social and mobile media technologies.

Figure 5: Storify Search Dashboard



Past studies have shown that if students learn simply about media abundance, framing and bias, they will be prone to cynical dispositions towards media in general, without pausing to ask questions or seek further information (Mihailidis, 2009). Curating content shifts the learning from passive to active, forming learning environments where students are creating diverse stories and viewpoints that allow them to engage with the nature of online information flow and explore how they can empower their knowledge base through this diversity. This also allows for a greater appreciation of the sheer number of voices that exist online and the implications such diversity has for the powerful, the repressed, and all stakeholders that have an online voice.

Teaching point #6 - Empowering civic values and civic voices

Finally, the overarching approach to digital curation pedagogy should be about empowering individual agency around expression, community, and value. Young adults must be made aware time and again of the responsibility that lies with them on the Internet. Each click into a page, each link shared with a group, each status update, helps to define the quality and diversity of information online.

Storify's curation platform allows students, at the conclusion of an assignment, to ask: What questions did I ask? What can I contribute to this issue through

my own social circles? How can I help build a better understanding of the issue? What responsibility do I have, and to whom? While shifting the learning paradigm from response-driven to creation-driven allows for more dynamic approaches to understanding information online, this does not absolve the need for real self-reflection and introspection on what relevance the process holds for hegemonic structures and civic voices in participatory democracy.

Storify allows students to question the act of sharing the Kony 2012 video, retweeting Occupy Wall Street messages, commenting on Tahrir Square, and/or alerting friends of upcoming local events. The key to curation-driven pedagogy is that it can empower responsibility in students to understand what digital technologies give and take away, and how we can use them to better develop communication habits both on and offline. These are habits that we will increasingly need as more and more of our social functions are driven by mediated platforms and spaces.

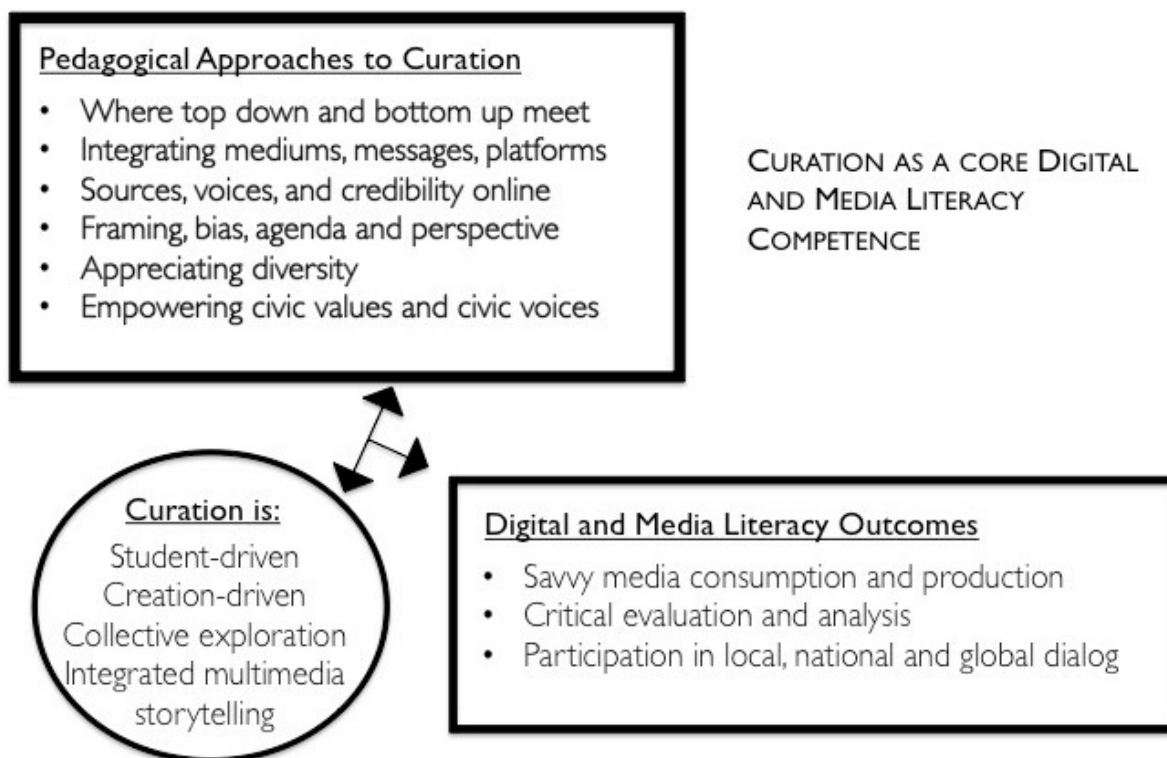
Conclusion: Towards a Framework for Curation as a Core Digital and Media Literacy Competency

The pace of change across the communication and media industries has allowed for real creative growth in approaches to teaching and learning about the influence of media in society. If communication educators are to prepare students for lives of critical inquiry, at the heart of their mission is to develop media literate habits for an increasingly media centric world. This necessarily means that students learn savvy media consumption and production skills, critical evaluation and analysis of media messages, and participation in local, national and global dialogue (Frechette 2002; Gaines 2010; Hobbs 2010, 2011; Tisdell 2008). This also means that teachers harness the opportunity to integrate into their classrooms the informal learning that social media spaces and platforms provide.

The six teaching points above collectively approach a framework that includes curation as a core media literacy competence for the digital generation (See Figure 6). Students, as curators themselves, can struggle with assessing content, perspective, platforms, agendas, and frames as they sift, sort, and organize information from the depths of the Internet. Through student-driven, creation-driven, collective and integrated teaching approaches to curation, the framework aims to build towards savvy media consumption and production, critical evaluation and analysis, and participation in local, national and global dialog.

The framework also addresses the ability to see diversity and civic voice as core competencies in the curation process. As students learn to build cohesive stories and ideas from a wide variety of sources, they can learn about the diverse types of content that inform a story, and the avenues they have-through social media tools and platforms-to be part of the discussion.

Figure 6: A framework approaching Curation as a core Digital and Media Literacy Competence



While this framework offers a prospective attempt to build curation into the media literacy conversation, this approach to learning is limited by both theoretical and practical concerns. Technological access in schools is largely uneven. To have access to digital curation programs necessarily means that students must be online, with computers and Internet connection available, and with basic skills in online navigation. None of these needs can be taken for granted. Further, the Storify tool is a public one, and therefore can conflict with student privacy rules and regulations. Teacher preparation with the software is also a limitation of this type of education. Continuous upgrades to software and hardware, as well as the knowledge needed for teachers to readily handle both the software and the educational aspects of it will hinder its inclusion in the classroom.

Further, curation, in a sense, is what we have been doing in classrooms for decades now. Incorporating critical approaches to framing, bias, analysis of agendas and perspectives in the information landscape has been going on for quite some time, as evidenced by scholarship dating back decades. This paper makes no attempt to invent new pedagogy or claim to break new and profound ground. Rather, this paper attempts to align new educational approaches to critical inquiry with the increasing amount of time youth spend with digital, social, and mobile media technologies.

Curation is what we all do on our laptops, tablets, and phones, and in our social networks and web browsers. It starts from a young age, and continues as a lifelong competency. Curation, as an approach to bringing digital and media literacy competencies into the classroom, can help build meaningful teaching and learning approaches for today's participatory media landscape. The hope of this paper is to help engage new approaches to critical engagement around media use, creation, and expression through curation. The points made here extend beyond Storify specifically, and can work to engage learners at all stages of education. We hope that the ideas put forth lead to new creative and critical approaches to teaching with and about digital media in classrooms of today and tomorrow.

References

- Armano, D. (2009). Six Social Media Trends for 2010. *Business Week*, November 2, 2009. http://www.businessweek.com/managing/content/nov2009/ca2009113_596100.htm [Accessed March 2013]
- Bartlett, J., and Miller, C. (2011). Truth, Lies and the Internet: A report into young people's digital fluency. Demos. http://www.demos.co.uk/files/Truth_-_web.pdf [Accessed March 2013]
- Bennett, W. L. (2008). Changing citizenship in the digital age. In W.L. Bennett, Ed. Civic life online: Learning how digital media can engage youth. *The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning*, (1-24). Cambridge, MA: The MIT Press.
- Buckingham, D. (1994). *Children talking television: The making of television literacy*. London: Falmer.
- Carr, N. (2010). *The Shallows: What the Internet Is Doing To Our Brains*. New York, NY: W. W. Norton and Company.
- Constine, J. (2012). Facebook Plucks At Twitter With Launch Of News Feed Interest Lists. <http://techcrunch.com/2012/03/08/facebook-interest-lists/> [Accessed March 2013]
- Dahlgren, P. (2012). Young citizens and political participation online media and civic cultures, *Taiwan Journal of Democracy*, 7(2), 11-25.
- Dalton, R. (2009). *The good citizen: How a younger generation is reshaping American politics*. Washington, DC. CQ Press.
- Erstad, O., Gilje, O. & de Lange, T. (2007). "Re-mixing multimodal resources: multiliteracies and digital production in Norwegian media education" *Learning, Media and Technology*, 32/2, 183-198.
- Frechette, J. D. (2002). *Developing Media Literacy in Cyberspace: Pedagogy and Critical Learning for the Twenty-First-Century Classroom*. Praegar.
- Gaines, E. (2010). *Media Literacy and Semiotics*. New York: Palgrave.
- Grossman, L. (2012). The Beast with a Billion Eyes. *Time Magazine*. Jan 30, 2012. Retrieved from <http://www.time.com/time/magazine/article/0,9171,2104815,00.html> [Accessed March 2013]
- Hargittai, E. (2005) Survey Measures of Web-Oriented Digital Literacy. *Social Science Computer Review*, 23: 371-379.
- Hobbs, R. (2010). "Digital and Media Literacy: A Plan of Action," a White Paper on the Digital and Media Literacy Recommendations of the Knight Commission on the Information Needs of Communities in a Democracy . Washington DC: The Aspen Institute.
- Hobbs, R. (2011). *Digital and Media Literacy: Connecting Culture and Classroom*. Thousand Oaks, CA: Corwin Press.
- Ito, M. (2009). *Living and Learning with New Media: Summary of Findings from the Digital Youth Project*. Cambridge, MA: MIT Press.
- Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York: NYU Press.

- Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., and Robinson, A. J. (2009). "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century" *A Report for the MacArthur Foundation*. Boston: MIT Press.
- Jones, C., Ramanau, R., Cross, S., and Healing, G. (2010). Net generation or Digital Natives: Is there a distinct new generation entering university? *Computers & Education*, 54(3), pp. 722-732.
- Kahne, J., Lee, N., & Feezell, J.T. (2012). Digital media literacy education and online civic and political participation. *International Journal of Communication*, 6, 1-24.
- Kaiser Family Foundation. (2010). *Generation M2: Media in the lives of 8-18 year-olds*. Henry J. Kaiser Family Foundation, Menlo Park, CA. <http://www.kff.org/entmedia/mh012010pkg.cfm> [Accessed March 2013]
- Kellner, D. (1998). Multiple literacies and critical pedagogy in a multicultural society, *Educational Theory*, 48(1), 103-122.
- Kellner, D. (2004). Technological transformation, multiple literacies, and the re-visioning of education, *E-Learning*, 1(1), 9-37.
- Kellner, D., and Share, J. (2005). Towards critical media literacy: Core concepts, debates, organizations, and policy. *Discourse: Studies in the Cultural Politics of Education* 26(3): 369-386
- Kellner, D., and Share, J. (2007). Critical media literacy, democracy, and the reconstruction of education. In D. Macedo & S.R. Steinberg (Eds.), *Media literacy: A reader* (pp. 3-23). New York: Peter Lang.
- Kennedy, G., Dalgarno, B., Bennett, S., Judd, T., Gray, K., and Chang, R. (2008) Immigrants and natives: Investigating differences between staff and students' use of technology. In *Hello! Where are you in the landscape of educational technology?* Proceedings ascilite Melbourne 2008: <http://www.ascilite.org.au/conferences/melbourne08/procs/kennedy.pdf> [Retrieved 14 January 2013]
- Kiili, C., Laurinen, L., & Marttunen, M. (2008). Students evaluating Internet sources: From versatile evaluators to uncritical readers. *Journal of Educational Computing Research*, 39(1), 75-95.
- Kuiper, E., & Volman, M. (2008). The Web as a source of information for students in K-12 education. In J. Coiro, M. Knobel, C. Lankshear, & D.J. Leu (Eds.), *Handbook of research on new literacies* (pp. 241-266). Mahwah, NJ: Lawrence Erlbaum Associates.
- Lessig, L. (2008). *Remix: Making Art and Commerce Thrive in the Hybrid Economy*. (New York: Penguin).
- Leu, D., McVerry, J.G., O'Byrne, W.I., Kiili, C., Zawilinski, L., Everett-Cacopardo, H., Kennedy, C., Forzani, E. (2011). The New Literacies of Online Reading Comprehension: Expanding the Literacy and Learning Curriculum. *Journal of Adolescent & Adult Literacy* 55(1), 5-14.
- Loader, B., (Ed.) (2007). *Young citizens in the digital age: Political engagement, young people and new media*. New York, NY: Routledge.
- Luke, A., & Freebody, P. (1997). Shaping the social practices of reading. In S. Muspratt, in A. Luke, & P. Freebody (Eds.), *Constructing critical literacies: Teaching & learning textual practice*. Sydney: Allen & Unwin; and Cresskill, NJ: Hampton Press.

- Mihailidis, P. (2009). "Beyond Cynicism: Media Education and Civic Learning Outcomes in the University." *International Journal of Media and Learning* 1/3, 1-13.
- Morozov, E. (2011). *The Net Delusion: The Dark Side of Internet Freedom*. New York: Public Affairs.
- OfCom. (2010). Children's media literacy audit 2010. UK, London. [Retrieved 14 January 2013] <http://stakeholders.ofcom.org.uk/market-data-research/media-literacy-pubs/>
- Pew Research Center's Project for Excellence in Journalism. (2012). *The State of the News Media 2012: An Annual Report on American Journalism*. <http://stateofthemedias.org/>.
- Prensky, M. (2001). Digital Natives, Digital Immigrants. *On the Horizon* 9(5), 1-6.
- Rheingold, H. (2008). Using participatory media and public voice to encourage civic engagement. In W. Lance Bennett (Ed.) *Civic life online: Learning how digital media can engage youth* (97-118) Cambridge, MA: MIT Press.
- Rosen, L. (2010). *ReWired: Understanding the iGeneration and the Way They Learn*. New York, NY: Palgrave Macmillan.
- Rosen, L. (2012). *iDisorder: Understanding Our Obsession With Technology and Overcoming Its Hold On Us*. New York, NY: Palgrave Macmillan.
- Sanchez, C.A., Wiley, J., & Goldman, S.R. (2006). Teaching students to evaluate source reliability during Internet research tasks. In S.A. Barab, K.E. Hay, & D.T. Hickey (Eds.), *Proceedings of the seventh international conference on the learning sciences* (pp. 662-666). Mahwah, NJ: Lawrence Erlbaum Associates.
- Shirky, C. (2008). *Here Comes Everybody: The Power of Organizing Without Organizations*. New York, NY: Penguin.
- Shirky, C. (2010). *Cognitive Surplus: How Technology Makes Consumers into Collaborators*. New York, NY: Penguin.
- Taboada, A., & Guthrie, J. (2006). Contributions of student questioning and prior knowledge to construction of knowledge from reading information text. *Journal of Literacy Research*, 38(1), 1-35.
- Tewksbury, D. and Wittenberg, J. (2012). *News on the Internet: Information and Citizenship in the 21st Century*. (Oxford Studies in Digital Politics). New York, NY: Oxford University Press.
- Tisdell, E. (2008). Critical media literacy and transformative learning. Drawing on pop culture and entertainment media in teaching for media diversity in adult higher education. *Journal of Transformative Education*, 6/1, 48-67.
- Weinberger, D. (2007). *Everything is Miscellaneous: The Power of the New Digital Disorder*. Chicago, IL: Holt.

Figures

Figure 1 - Storify Curation Platform

Figure 2 - Integrated Source Dashboard

Figure 3a - Kony Curation Project Reports

Figure 3b - Kony Curation Project Voices

Figure 4 - Storify Text Box Integration Function

Figure 5 - Storify Search Dashboard

Figure 6 - A Framework Approaching Curation as a Core Digital and Media Literacy Competence