The Graphic Research Paper: Navigating Information Using Smart Phones, Pictures, and Modern Media

Curriculum Unit 14.01.12
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Introduction

Students in 2014 have a problem they don't yet recognize. The problem results from a time waster, a new version of which each generation of students seems to boast, hindering the progress of many. The problem is relatively new – seldom does a teacher in modern day catch a student passing a note, and students are certainly not often distracted by the goings on of the world outside the classroom window. But there is a pervasive distracting behavior, quite common, and quite often disciplined. I speak, of course, of cell phone use; of the countless hours students spend on the most modern form of information gathering and communication – the Internet and social networking, more often than not on their phones, tablets or other handheld devices, easy to draw from a pocket or backpack sleeve and misguidedly believed to be hidden from teacher view. The problem applies to students of all ages, but particularly to those on the precipice of higher education or the job force, forming habits they may, unfortunately in this case, last them a lifetime. This curricular unit is designed specifically for inner-city twelfth graders in an arts-focused magnet school, but it can be applied to any classroom. The paradox I will be addressing is, in 2014, the problem is juxtaposed directly with the solution. This curricular unit will challenge educators as to why we are disciplining this behavior, when we could be fostering the better use of it.

Students use their cell phones to text-message each other (hence the happenstance of actual note-passing being rendered anachronistic), to log onto social networks, and to surf the Internet. And right there, beneath the surface of the status updates and fascinating goings-on of their friends, is a virtual world of information, available to all of them – if they only had the capability and inclination to use it effectively – for learning, for research, and ultimately, it is hoped, for personal enlightenment.

Historically, students in school have met with predominantly fictional texts – novels and novellas, short stories and excerpts, to name a few. Recently, particularly with the growing advent of Common Core State Standards, we are shifting to more non-fiction focused instruction. Students are reading news articles, essays, blogs, and even topical books. Many are materials provided for them by their teachers, but so much more is available to them at the touch of a button through an Internet search. What we as teachers are left with is a problem – how do we equip our students with the proper tools with which to navigate the myriad kinds of information available to them; to instill in them the skills necessary to filter what has become a world of information, un-
distilled, unregulated, and not always legitimate? As much of the information students are confronted with via the World Wide Web is presented through pictures – a news story or blog is always enhanced by the picture(s) included – it will become increasingly important for them to be able to interpret the meaning of the pictures they see, as the very medium of the Web itself is growing more and more dependent on pictures.

This curricular unit focuses on the images we find included in modern media – literature, essays, news stories, blogs and Web pages – and the history of the use of pictures to convey information. Students will study the evolution of communicative images (pictures used to communicate meaning) from cave drawings to momentous points in the evolution of images with regard to media, modern news sources, and social networks like BuzzFeed, Instagram and Facebook, Internet memes, and hallmark instances of the in-between. But to what end? Once students can navigate information on the Web through pictures, how can they immediately put their new skill to use? To do that, students will create a graphic research paper. Mirroring the effectiveness of pictures in the ubiquitous modern graphic novel, students will enhance their skills in presentation of research by creating a research project that, like the modern Internet, will rely heavily on the use of pictures.

Thus, students born of the information age will come away with a more mature understanding of the data they are confronted with on a daily basis. The cell phones they use so loyally for distractions and time-wasters will now have the new possibility to be transformed into a source of enlightenment and an opportunity to enhance their studies. Computers will evolve from simple devices for keeping in touch with friends or even a dangerous place where predators lurk, to resources for communication and study. As these students go off to college, the hope is that they will go with the personal resources to navigate electronic resources and to be successful in research as in life.

Background Information

Students participating in this lesson unit are 12th grade, inner-city high school seniors. Most, if not all, have ownership or the use of cellular devices, and use them regularly. One of the most pervading problems in our school is the use of these devices for the purposes of communication and/or distraction during classes. The behavior is not uniformly disciplined – each teacher has their own method for dealing with said issue. Some teachers let it go, over-looked. Some teachers are very strict to the point of confiscating devices. The methods run the gamut, but the one uniform certainty is that the issue persists, and it affects instruction.

Additionally, there is not currently a senior-level English research paper required. The advent of PA 12 – 40 (a CT legislation requiring high school seniors to maintain certain SAT scores for admission to state colleges, as they will no longer be offering developmental courses in English and math), has brought to light the lack of research and composition skills from which graduating seniors are suffering.

Therefore, this unit will offer a method through which distracting cell phone use can be combated; a hopeful enlightenment by which students can realize how much more advantageous use of their cell phones can be; and techniques to effectively and validly research and compose a written work of academic significance – all through the study of pictures. Recent studies have shown that the incidence of discipline for cell phone usage in schools is dropping, indicating that educators are realizing that their time is better spent on instruction than trying to stave the use of cell phones in class. Since we are coming to the realization that they are here to
stay, why not employ cell phones to the academic use they are so very apt for?

**Rationale**

Students go beyond simply wasting their time. Teachers from the elementary grades to university undergraduate programs have experienced students not only distracted on their devices, but also often distracting others through texting, sharing videos, etc., in a modern trend indicating disruption is becoming more advanced and prevalent. Since the advent of American education, the teacher – in the role of classroom manager – has worked to steward a classroom environment conducive to concentration and the dissemination and synthesis of useful information. Strong classroom management is the hallmark of any great K - 12 classroom. Figuring out a way to manage behaviors effectively is absolutely necessary before any real instruction and learning can take place. It used to be that talking, lack of focus, passing notes, and even staring out the window were the most common of a teacher's concerns.

Now, we see an ironic juxtaposition – the more and more easily information is available to students, the more it becomes a distraction from their picking up useful information. Facebook is only the beginning; Instagram, Twitter, and Snapchat only the foundational bases. The most modern trend involves the links available on these most popular social networking sites. Students not only learn of the goings-on in the lives of their friends through the social "news feed," but they also see consistent posts for links to other Web sites. These sites provide "articles" and videos, some with the distinct purpose of providing distracting entertainment. These sites include Distracify, Vimeo, Youtube, Reddit, and many more.

As adults we have issue enough (having been converted from page-readers ourselves) with what we see as the newer media of communication. What do we do about the students who have ever known only that? Nicholas Carr, in his article "Is Google Making Us Stupid?" takes the point a step further, asserting that the modern preoccupation with gleaning information through technology is actually affecting our minds and habits adversely. He states in his article:

> Over the past few years, I've had an uncomfortable sense that someone, or something, has been tinkering with my brain . . . . My mind is . . . . changing. I can feel it most strongly when I'm reading. Immersing myself in a book or a lengthy article used to be easy. My mind would get caught up in the narrative or the turns of the argument, and I'd spend hours strolling through long stretches of prose. That's rarely the case anymore. Now my concentration often starts to drift after two or three pages . . . . The deep reading that used to come naturally has become a struggle.

The case is no different for our students, who more often prefer digital content to printed text. Carr goes on to say that the "someone" or "something" he refers to is the Internet – citing his "spending a lot of time online, searching and surfing and sometimes adding to the great databases of the Internet." He touches on a trend that adults have to worry about – those of us who grew up with books, and not much more than dial-up Internet. What does this say about members of the modern young generation, who have always and increasingly known not much more than their cell phone or tablet devices as sources of information – either
entertainment, "news," or otherwise?

Students will use their phones in class, which any teacher in the modern classroom is certain of. Whether it be for part of a class project or using it for distracting texting, Internet search, or even the dreaded "selfie," students seem to have an intrinsic need to view their phones as a habit, in their hearts and minds consistent with inquisitive questioning.

Therefore, it is logical to think that students will be open to the idea of using their cell phones for class assignments. Perhaps we can reverse what Carr is worried about – that brains are transitioning to be less dedicated to reading large blocks of text for extended periods of time, and more apt to opt for shorter, more superfluous bursts of information – but that is not what this unit is about. It is not about modifying behavior. It is about utilizing a habit that already exists. Teaching students to hone their Internet searches and habits to focus on more advantageous information gathering and synthesis may be the best route to address this growing problem.

Additionally, and for practical application of this new skill, it is important to note that this coincides with another existing problem – that too many high school students are being graduated without real research skills, and this partly because the concept of the research paper is unappealing to many. Once students synthesize the skill of using the myriad types of information available to them to search the Internet for meaningful information instead of superfluous, students will be tasked with utilizing that skill to execute effective research. The product will be a research paper dependent on pictures – presenting images that enhance the message of the words and vice versa: a graphic research paper.

Objectives

The following curricular objectives represent an overview of topics, skills, and concepts students will encounter, and are addressed in more detail throughout the unit.

In this unit, students will be able to synthesize social networking Web sites as legitimate foundational resources for exploration of images as forms of communication. They will be able to analyze pictures in news articles from legitimate news sites in order to synthesize their meaning, and tell whether the picture itself is a more valuable source of news than the words accompanying it. Students will be able to understand and appreciate pictures/images as art, entertainment, sources of information and methods of communication. They will also be able to utilize their mobile devices for research, as sources of legitimate news, and as communication devices capable of creating their own art and communicative images. Students will be able to present a picture of their own finding, explaining in writing the message it communicates. They will be able to present a picture of their own taking, explaining in writing the message it communicates. Also, students will be able to take a well-known artistic image and explain its meaning. Students will be able to utilize Internet images to decipher whether a Web source is legitimate. Students will be able to navigate Web sites and decipher for themselves which ones deliver valid, legitimate, important information. Consequently, they will be able to utilize the aforementioned Web sites to use information for projects of their own determining, based on a pre-designed list. Finally, they will be able to utilize legitimate information sources on the Internet to design and compose a comprehensive research paper.
"Okay, everyone please take out your cell phones."

This is my highly anticipated first line of the unit’s execution. It is important to make students feel immediately engaged. Starting off the entire unit by asking them to take out their phones (the opposite instruction making up most of what they hear regarding their favorite possessions), will hopefully have a lasting effect on their engagement for the unit. This instruction begins an activity which will have the students researching pictures on news Web sites that tell a story better than words would themselves. A possible problem here would be the rare student who does not own or is not in possession of a cell phone. I have experimented with this particular lesson activity in several classes, and I have yet to encounter this problem, but a contingency plan – like having classroom computers as backup – is advisable.

Students may begin by quite simply enjoying the synthesis of information and art through pictures. My school is an art school – each student dedicating daily time to an artistic discipline (either visual art, creative writing, theater, dance or music). I will be incorporating each art (or the students’ choice) into lesson activities in the unit.

Over the course of the unit, students will be working with pictures to accomplish an understanding of their significance in relation to language – interpreting in writing what certain pictures mean and committing to image their take on certain writings. Students will explore many different Web sites as our learning begins to focus on the modern information age, and at that point their understanding of the significance of pictures will drive their focus on how to use this to navigate information on the Web. Students will be able to analyze the effectiveness of pictures on the Web as compared to text on the Web. This is of growing importance as an academic generation grows weary of lengthy texts – even text itself.

The Onion article "Nation Shudders At Large Block of Uninterrupted Text" satirizes our nation’s growing distaste for reading large blocks of text. Modern blogs and "news" of any kind being presented in list form, using more pictures to communicate the message than words, are growing in popularity. We will focus on whether the conclusion of said article is a sign of a growing national passivity when it comes to collecting information or simply a shift in how we receive and interpret information.

Among the products of this unit will be an informational article that students create themselves – using an image of their own discovery or even a photograph they’ve taken themselves (rare would be the student to shy away from an opportunity to use his or her smart phone for an assignment) and as little text as possible. The goal for this assignment is for students to match form with meaning – to create a product that actually is part of what they’re studying. Their work, when completed, could become part of this modern canon of expository images, outlining their study of analysis of pictures to convey language. For this project, students will be able to utilize their study of pictures in order to conceptualize and create their own, offering written explanation as to their significance. This activity will also begin their introduction into the use of pictures to present researched information.

Once they have contributed to modern culture with said photo-journalism project, students will utilize their skills in discerning valid information to construct a research paper. They will take what they have learned during the course of the unit, utilizing pictures to navigate the information they have in front of them, and apply their skills to research – i.e., how to know which sources on the Web, and in media, they can trust to be

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valid sources of information.

To do this, students will continue their exploration of the Web. This will include a lesson on research and the conventions by which valid sourcing is upheld. We will explore different Web sites, both valid, invalid, and the gray area in between. Exploring the reliability (or lack thereof) of Web sites like Wikipedia, and ways around them – for instance, utilizing the links at the bottom of Wiki articles, or opting altogether for more valid alternatives like encyclopedia.com. Additionally, it will be advantageous to spend time emphasizing the importance of using sites with URL's ending in .edu or .gov rather than .com.

The students will then venture into a study of the history of pictures to convey information. Using the image's effectiveness in catapulting social media sites like Instagram to the top of the world's social application downloads as a basis, students will move on to view the history of images, and even their use to effect political change.

At the completion of this unit, students will be able to apply their study of pictures and their significance as tools of communication in order to navigate the World Wide Web for valid research information.

Photographs and Social Media

Even with the advent of modern technology, photographs seem to be the stalwart medium through which we view life already lived. More so than paintings, more so than sculpture, more so than memory, we look to the photograph as a record of us - the evidence of our youth and grandeur and accomplishment and relationships. The ease and effectiveness of capturing photographs are the basis of that utility; their clear reflection of reality is the root of their predominance. The streamlining foundation of the first portion of this unit will be photographs - their history, their use in modern media, and their enduring ability to thrive as a true basis for valid information. Students may work regularly with famous photographs and researched photographs and photographs they've taken on their own, consistently analyzing what and how they communicate messages. Additionally, even pictures of works of art, it will be stressed, are photographs we have taken for the purposes of viewing them.

Wonderful examples of images which communicate volumes include those of Banksy, the notorious British graffiti artist, whose wall art has landed him behind bars on several occasions, but has indeed effected political change. More than this, the way he has made important the power of images in his books acts as a magnificent example of how even the creators of the images themselves are affected by them. Banksy states in his book Wall and Peace, "As I lay there listening to the cops on the tracks I realised I had to cut my painting time in half or give up altogether. I was staring straight up at the stenciled plate on the bottom of a fuel tank when I realised I could . . . . make each letter three feet high." Pictures of his art are easy to find with a simple internet search - which students can conduct themselves on their cell phones - and are rich examples of images that inspire thought and change. One notorious piece of his mixed media graffiti art depicts a custodial worker washing away the words "What we do in life echoes in eternity" with the last word being washed away. Banksy exudes the image creator's reverence for pictures, speaking to the very essence of this curricular unit - pictures matter. More than that, they are as significant a communicative medium as words.
Furthermore, I believe it is important to show students that their daily and more frequent Internet usage is not without meaning – quite the contrary. The many social networking Web sites they frequently surf – Facebook, Twitter, and especially Instagram – have merit as media and can be used as a starting point for valid research and information gathering. *This is Happening: Life Through the Lens of Instagram* by Bridget Watson Payne (ed.) is a fantastic photo journal of Instagram pictures, showing how even common social networking can produce images of beauty and significance.  

Teachers may wish to guide an in-depth exploration of pictures – have students search for them or be provided with them, analyze the communicative nature of the image, create some themselves, and ultimately incorporate research done through the medium. More examples of good media to use are outlined further in the Classroom Activities section.

**Image-based Research and the Graphic Research Paper**

The drive of this curricular unit is to have students embark on the study of pictures; then, the study of pictures as a means to navigate information in modern technology; and ultimately, the use of that skill set to conduct research for and design a research project. Students are often daunted by the prospect of forming their own ideas based on research, and the hope is that making it image-based will ease that trepidation. The idea that they can design a comic book or graphic novel-style work to present researched assertions may appeal to many more artistic students, and even those who are not as artistic can utilize found images to express their ideas.

Rubrics are an effective and even imperative tool in today's classroom. Teachers may wish to include one if implementing the graphic research paper in their classrooms. For my purposes, I will be including parameters for a Visual Thesis Statement (outlined further below in "Classroom Activities"), appropriate length, number of pictures or panels that should be used as well as how words should be limited (the project is, after-all, meant to be picture-focused while still presenting the appropriate thought and research), appropriate citations (including the use of researched images if students are using images to present information rather than creating them), and any number of appropriate research considerations.

Possible activities surrounding the Graphic Research Paper are outlined further in the Classroom Activities section.

**Classroom Activities**

**Activity One: Pictures in Learning, Pictures in Life**

Students should be inspired to think in a different way about the images they see every day, as well as the use of their cell phones. By beginning the unit with "Everyone – please take out your cell phones," students might be pleasantly confused as to who you are, let alone what will happen next. Once cell phones are out (or students without the use of such devices are on computers), they should retrieve an old or search for a new
picture that means something to them. It must be appropriate for class, and can be of anything – family, a fun event, or even a celebrity or movie still. What does this image mean to them? After they write a brief journal response, they could be asked: What do you think this image might communicate to others?

Every image is meaningful – some are socially significant. Students may respond to what "socially significant" might mean. Answers may include – it means something to most people; it is relatable on a mass scale; it encompasses a theme or pathos that is universal.

**Plato's Cave and cave drawings**

"Plato's Cave" is a thought experiment that can be utilized for a wonderful activity surrounding the use of images to communicate a message. The thought activity surrounds a concept of a cave full of beings, bound and forced to look in one direction, communicating with each other about images they see displayed on a wall in front of them. The animalistic images are projected on the wall by "masters" holding puppets up to a fire. The reader must decide if the bound residents of the cave are forced to interpret themselves as the beings projected on the wall, as this is all they have ever known, so the voices they hear of each other and the masters can only be interpreted as those of the shadows on the wall (Appendix A-1). Students may work individually or in groups to draw an interpretation of what they've read – what the cave looks like, leading to a class discussion on the significance of images. 7

This provides a segue into talking about the difference between that "cave" and the cave early man lived in (cave drawings/prehistoric art). The Lascaux cave drawings are very early socially significant images. In order to discuss the origin of language and whether images coincided with that, students could be prompted: Is anyone familiar with this work (Appendix A-2)?

![Cave painting of a horse](http://en.wikipedia.org/wiki/File:Lascaux2.jpg)

Following a class discussion on this drawing from the Lascaux Caves, students could ask: What makes this socially significant? Answers can include: whoever drew it knew what a horse looked like; a horse must have been a common thing back then if it was drawn like this; everyone knows what a horse looks like.

How we interpret images speaks to how we interpret the world. According to Susan Sontag, "photographed images do not seem to be statements about the world so much as pieces of it, miniatures of reality that anyone can make or acquire." 8 Therefore, the significance of the image as a means of communication is paramount. Images are a part of language, and both factor into perception.

*Perception, with David M. Eagleman and Susan Sontag*
Working with several creative images that contain optical illusions, students may be challenged to consider on what exactly is their view of reality based. They will begin with an exercise incorporating said images in the form of handouts. Many fun examples of optical illusions can be found online (Appendix A-3). For these purposes, we will use a blind spot text outlined in *Incognito* by David M. Eagleman – wherein the subject closes one eye while looking at a picture of a plus sign and a circle, and brings the picture closer to their face. At a certain point, the circle disappears into our "blind spot." (Appendix A-3) Regarding this clear gap in our field of vision, Eagleman argues that "You're not perceiving what's out there. You're perceiving whatever your brain tells you." With these kinds of holes in our vision, how can we assume that anything we perceive is real? Student responses may include: We have formed a common agreement on consistencies in what we see; we all agree that a plus sign looks like what we just stared at to find our blind spot; since prehistoric times, our view of a horse is roughly that of the drawing in the Lascaux Caves. We like to have our reality "confirmed" as Sontag puts it, an experience that is "enhanced by photographs."

*Mini-Essay*

What is it about us that makes us like reality to be confirmed – does anyone usually go around thinking about the fact that perception is reality, and what we see is simply what our brain tells us is there? An exercise teachers may wish to consider is to have students read excerpts from the works by Eagleman and Sontag (Appendix A-4) and then respond to the following prompt: How do pictures enhance our grasp of what's real? Use evidence from our activities and readings in support of your response.

*Activity Two: Pictures and Modern Media*

Thought about the image's role in the evolution of our perception is imperative to this curricular unit, as it assists students in considering how important images are in our processes of communication. In the modern era, we have access to both archives of photographs and images of old, and practically everything new that is available. Teachers may be inclined throughout the course of this unit to take a look at images that moved people, as well as the sources of these images, as this will lead into the study of images to navigate the vast amounts of information available to students.

*Photos that Change the World*

To decide exactly which images to present to students, it does not hurt to "consult" image experts, as it were, for advice on the ones that have had an impact. In a thoughtful TED Talk by Jonathan Klein entitled "Photos that Change the World," the head of Getty Images (Appendix A-5), the leader of one of the world's most wide-ranging and complete stores of stock images, discusses the impact images have on all of us – even in some cases causing real change. Klein says, "Images have provoked reactions in people, and those reactions have caused change to happen." A possible prompt for students based on this video is: Is this true? After watching the TED talk, students can spotlight several of the seminal images highlighted in Klein's presentation, analyzing them for their communicative merit. One particularly apt image that Klein spotlights in the talk is the view of earth from the moon – both the first image ever taken of this, for some perspective on the evolution of photography and space travel, and then a clear, vivid picture from the Apollo 8 mission are good examples for students (Appendix A-6). One might consider whether Klein's saying "some people credit the environmental movement to our seeing the planet like this for the first time" is true. A thoughtful expression to students of the importance of this image is conveyed by asking if they can imagine what people must have thought about conservation before they knew what the whole earth actually looked like.
Modern Online Media/Social Media

The following activities fit into a lesson plan that would help students synthesize the role of pictures in modern media and social networking. This may be a particularly engaging aspect of a curricular unit such as this since, as aforementioned, social media and Internet search are already predominant aspects of student’s “distracting” behavior with their cell phones. Here would be an appropriate place to conduct surveys on what exactly social media means to students. Why and how are Facebook, Instagram, Twitter, Snapchat or any other social media important to their lives? What do they enhance, and how? How would any of these media platforms change if pictures were taken out of the equation – prohibited from the newsfeed or the Twitter feed? Would they be the same? Responses may include that obviously they would not be the same; that they’d be virtually unidentifiable; that the medium of social networking sites would simply not work without the inclusion of pictures. Students should consider why that is, and teachers may wish to employ a writing assignment for synthesis/check for understanding: “Why are social media dependent on pictures? Include evidence from our study of the evolution of communicative images in media to support your response.”

BuzzFeed and image-based online news

BuzzFeed is an enigmatic online news site that has been known to juxtapose articles titled "What Life Is Like For People On Both Sides of The Israel-Gaza Conflict," with others entitled "The 100 Most Important Cat Pictures of All Time." While news topics vary greatly, the one constant is that BuzzFeed relies heavily on images in its journalism. Covering most of the world’s major news stories (as well as some entertainment and even clear fluff), BuzzFeed uses several (even sometimes 10 or more) pictures in its news articles where other news sites would use only one or two. Therefore, the site makes an interesting study of the modern inclusion of pictures in informational media. How does one, if at all, trust a news site that has the aforementioned articles juxtaposed on the same homepage? Just such a quandary may be interesting to modern students, and certainly pertains to this unit as relevant study. What does this say about modern media? Student responses could include: lots of different methods need to be used to gain the modern news reader's attention; people like to see the light side of things while reading about heavy, important current events; the reporting of news is becoming more modernized, and streamlined with other more frivolous types of media; and, most importantly, you don't have to trust it – you can always check another source to confirm or refute the validity of any Web source (a skill of paramount importance to good research). To come to these responses, perusing BuzzFeed on a projected screen with students to see that legitimate news articles can come from the same Web site as lists of cute cat pictures and quizzes about which Harry Potter character your personality best meshes with, will be helpful. Articles like the Israel-Gaza (or other current) news article can also be compared to articles of similar subject matter on other more established news sites, like CNN:

Students could try to decipher how the images impact the reporting of the news, after which they can be assigned class work to reintegrate use of their cell phones (or class computer if they don't have one), to find a legitimate news article (an issue of valid national or international concern) on www.BuzzFeed.com, and find a similar article on cnn.com or any local or other reputable news site. How do the many pictures in the BuzzFeed article impact the reader's view of what's being reported? Does it enhance understanding or feeling about the situation?

Activity Three: The Graphic Research Paper

Research papers are tough. They are tough on students who lack the skills or inclination for good research and the presentation of said research, and tough on the educators who work tirelessly to inspire even the most
lackluster manifestation of such. The graphic research paper is meant to solve two problems – that of alleviating some lack of student engagement in the research process by offering an alternative product, and the alternative product itself – i.e., a completely new, artistic way to look at research presentation. Keeping intact all research processes, and adding how the study of pictures can enhance that process, are key factors. At this point in the unit, teachers may want their students to have developed an understanding of the evolution of the use of images for communication, up to and including Web content of the modern era; and that this understanding is conducive to navigating the Internet for dependable information. For the graphic research paper, students will be tasked with putting these skills to the test, as it were. Study of communicative images will evolve to synthesis – i.e., students will be using images themselves to convey information. Like the popular genre of the graphic novel, the graphic research paper will tell a story in the mixed media of pictures and words. The "demand for double literacy," as W.J.T. Mitchell put it, is at the forefront of modern communication. As students have learned in this unit, pictures now more than ever are the basis for gleaning information. And so they will perpetuate that, in as creative a manner as they are willing and able to employ.

The "double literacy" of mixed media – W.J.T. Mitchell and Ken Robinson

How dependent are words on pictures and vice-versa? What are some examples of words and pictures working together? If teachers should be inclined to ask this of students, responses may include: Web sites like the ones we have looked at; comic strips/comic books and graphic novels, advertisements, pictures with captions in text books, any media on which words are extremely dependent on pictures and vise-versa. One might be inclined to question whether all media are this way – do words enhance pictures and pictures words when viewing online content or any media? W.J.T. Mitchell, in his book *Picture Theory*, asserts that "all media are mixed media . . . . there are no 'purely' visual or verbal arts." Therefore, we as viewers or readers (or both simultaneously, as it were), must depend on a "double literacy," as Mitchell puts it, or the ability to interpret both pictures and words at the same time – that the two, when presented together, enhance the understanding of the person experiencing them.

An opportunity exists to reintegrate cell phone usage as a class work assignment. Individually or in groups, students can be challenged to use their cell phones to find examples of media they believe to be homogenous – i.e., are "purely visual or verbal," as Mitchell put it. As much media is interdependent as such, students may have a hard time finding examples (at least with online and modern media content) – if they cannot, all the better, point made. However even if this is the case, it can be pointed out that things like dance and interpretive art are areas where it might be argued that the message is purely visual; or Web sites that rely heavily or only on text are areas where it might be argued that the message is solely verbal. Otherwise, much of our art, entertainment and modern media are interdependent on words and pictures enhancing meaning for each.

In order to inspire students to not simply combine media, but to integrate them – using pictures and words symbiotically – strong examples could be used. One such example is the video "Changing Education Paradigms" by Sir Ken Robinson on Youtube (Appendix A-7). It is an animated video set to a speech given on the state and future of education. The pictures and animation help enhance understanding of the speech, and students can be solicited to analyze this. Reponses may include: seeing a drawing of what he was talking about made it clearer – things like the ADHD epidemic and how schools are modeled like factories are made clearer by the pictures demonstrating it.

*The Visual Thesis Statement*
The task of writing an effective thesis statement is difficult even in words. Expecting students to not feel frustrated that they also must enhance it with a visual image can be daunting. The goal with the visual thesis statement is to allow for the visual aspect to ease the synthesis of writing an effective thesis statement. If they can express it visually, maybe that can aid them in writing one that is more effective. So, how does one represent visually something like, "Vincent Van Gogh's mental instability, while unfortunate, contributed to his tendency to paint in ways that moved people, and inspired generations of artists since"? Students might find an image online or create one themselves that is appropriately representative of their thesis statement. It will not be without the help of words, however – the objective is for the two media to work symbiotically to express what each respectively would not be able to alone.

Choosing a subject to research

To assist students in choosing their subject, teachers may review Jonathan Klein's point in his TED Talk on photography that images have the power to effect change. It is possible to widen the berth a bit (to allow for effective student choice in this project) and choose a subject who has effected change through visual art. Much homage is paid to writers who have effected political, cultural, economic or artistic change – and much of this is covered in high school English classes. This is an opportunity for students to mentally and academically incorporate visual artists into that cannon. They may choose an artist or painter or sculptor, a photographer or film-maker or actor, a graphic novelist or designer – who students will decide, through their research, has used their work to affect change in the world. Students will combine words and pictures to present a thesis, research and support, outlining how this person has caused that change.

For the purposes of this curricular unit, students should choose a visual artist who has effected change either culturally, politically, artistically, or in media, such as:

Vincent Van Gogh – artistic, cultural, mental health change
Pablo Picasso – artistic, cultural change
Andy Warhol – artistic, cultural change
Rene Mondrian – artistic, design, media change
David Carson – design, media change
Banksy – artistic, political change
Stanley Kubric – artistic, cultural, media change
Spike Lee – artistic, socio-political, cultural change
Denzel Washington – artistic, social change
Laverne Cox (transgender actor in popular TV series Orange is the New Black ) – societal, civil rights change

Process and Formatting for the Graphic Research Paper

Along with standard research methods, it is important to stress here that modern online research can be legitimized using pictures. When outlining with students which Web sites are valid, it can be noted that many,
as is the case with several we have gone over throughout the course of this curricular unit, incorporate images along with expository prose. In fact, for many Web sites, images are an indication of just such legitimacy (What would a news story be without the photojournalism to illuminate the points?). While not necessarily always the case, images can certainly add an aspect of legitimacy, if only for appeal to modern information-seekers.

Along those lines, students should present their research in the same format as either an established graphic novel, pictorial news site (like Buzzfeed), a collection of pictures (either found or created on their own) and captions, or they can be given more autonomy to create their own style – as long as it meets parameters set in place by the teacher (i.e., a minimum allotment of panels/pictures and a maximum for word usage). Teachers may wish at this point to provide further examples of what their projects could and should look like – graphic novels could be exhibited in class, comic strips and comic books, or any media by which a story is told using pictures alongside words to communicate a message. Other strong examples include Understanding Comics: The Invisible Art – a study on comics books told in the form of a comic strip by Scott McCloud, and Louis Riel: A Comic-Strip Biography by Chester Brown (Appendix A-8).

Students should be inspired to be as creative as possible.

**Bibliography**


Carr, Nicholas. "Is Google Making Us Stupid?" *The Atlantic*. July 1, 2008, http://www.theatlantic.com/magazine/archive/2008/07/is-google-making-us-stupid/306868/ This article about whether our online habits are making us less inclined toward deeper reading is particularly relevant in a modern media study.


"Nation Shudders at Large Block of Uninterrupted Text," *The Onion*, March 9, 2010, http://www.theonion.com/articles/nation-shudders-at-large-block-of-uninterrupted-te,16932/ This article is a strong example of how we perceive modern media.

Sontag, Susan. *On Photography*. New York: Picador USA, 2001. This publication includes the section "In Plato's Cave" which is important for several activities outlined in this curricular unit.

## Appendix A: Student Resources

1. Plato's Cave: http://en.wikipedia.org/wiki/Allegory_of_the_Cave
3. Optical Illusions:
   b. Others: http://www.optics4kids.org/home/content/illusions/
4. Excerpts from Eagleman and Sontag can be found in:
   a. Incognito by David Eagleman:
   b. On Photography by Susan Sontag:
      http://www.amazon.com/Photography-Susan-Sontag/dp/0312420099/ref=sr_1_1?ie=UTF8&qid=1406541384&s=books&sr=1-1
5. "Photos that Changed the World" by Jonathan Klein TED Talk:
   http://www.ted.com/talks/jonathan_klein_photos_that_changed_the_world
6. Photograph – view of the earth from the moon:
   a. The first image of the earth from the moon:
   b. View from Apollo 8: http://www.nasa.gov/vision/earth/features/bm_gallery_4.html
7. "Changing Education Paradigms" video with added animation, by Ken Robinson:
   https://www.youtube.com/watch?v=zDZFcDGpL4U
8. Comic-strip based books on amazon.com:
   a. Understanding Comics: The Invisible Art by Scott MCloud:
      http://www.amazon.com/Understanding-Comics-The-Invisible-Art/dp/006097625X/ref=sr_1_1?ie=UTF8&qid=1406521300&s=books&sr=1-1
   b. Louis Riel: A Comic-Strip Biography by Chester Brown:
Appendix B - Implementing Common Core State Standards

1. CCSS.ELA-LITERACY.WHST.11-12.2.A Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

This curricular unit is designed for use in teaching research and appropriate presentation of said research using unconventional formatting. Students will choose their topic and the ideas that surround it, and present research regarding this information using an image-based format (graphics and multimedia), as will they use these elements for the research itself.

2. CCSS.ELA-LITERACY.RI.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g., visually, quantitatively) as well as in words in order to address a question or solve a problem.

This standard will be addressed throughout the unit while students consistently explore multiple types of visual and verbal media for meaning and understanding. While finding and analyzing pictures, drawing pictures from informational text, and exploring media through pictures, students will address many questions and problems.

3. CCSS.ELA-LITERACY.W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Although the graphic research paper employs unconventional formatting, standard research techniques and process will be used. Students should be required to work with multiple sources in their research, as well as to generate questions about their subject beyond standard biographical information.

Appendix C - Using This Unit in Special Education

The graphic research paper, while a comprehensive research project, is also highly apt as a project for students with special needs who may benefit from using differing modalities regarding words and images. For students with pervasive developmental disorders such as autism, or students with specific learning disabilities such as dyslexia, this project may accommodate certain learning needs, and allow them to accomplish a level of research utilizing their strengths. This modality provides an opportunity for accommodation regarding the traditional research paper, rather than modification of the assignment as a whole. Therefore, it may provide students with special needs with improved access to the general education curriculum.
Notes

1. Nicholas Carr, "Is Google Making Us Stupid?"

2. While personal encounters with the scenario has been rare, it is probable that some students may not own a cell phone, or more likely not own one with Internet capability. For such students, contingency is necessary. In my classroom, there are four desktop computers available for student use – it is recommended that computers or another contingency be available for the students who do not have their own devices.

3. "Nation Shudders at Block of Uninterrupted Text," The Onion.


5. Bridget Watson Payne, ed., This is Happening: Life Through the Lens of Instagram.

6. At an art school like my own, this assignment certainly caters to a presupposed population of visual artists and students with a penchant for creativity alike. However, even at an art school, there are almost sure to be those who are less than enthused about an art-based project, based on tastes or inclination, modality preference or other factors. For these students, the option to use collected images to fuel their graphic research paper is an important, effective aspect of the project.


