Abstract

Wikipedia can be an excellent springboard for learning some profound lessons. We’ll look at practical ways to use it with students (grade 7 and up) to: a) develop solid research skills, b) think critically about the nature of authority and evidence, and c) produce persuasive written and oral arguments.

Intro

Let me first give a brief introduction to what Wikipedia is and how it is being used. When people first hear that Wikipedia is the online encyclopedia that anybody can edit, their first reaction is often one of skepticism. For instance, it is this fascinating fact which prompted comedian Steven Colbert to coin the term “wikiality” – meaning reality-according-to-Wikipedia¹ – and to urge his fans in July 2006 to change the Wikipedia entry on elephants to say that “the number of elephants has tripled in the last six months” (so if you had been looking at the page that day, you may have believed it).² On the other hand, witness this following demonstration of Wikipedia in action.³ This YouTube clip is a time-lapse account of the creation and evolution of an entry that was created following the London Tube bombings in 2005.⁴ Amazingly, a well-referenced and coherent narrative was produced in mere hours. This collective power – this “massively distributed collaboration”⁵ – also happens because Wikipedia is the Encyclopedia that any person is free to edit.

So, in spite of what many perceive to be weaknesses – actually because of them⁶ – Wikipedia has brought many benefits:

- Free, useful content (as well as new and more obscure stuff)⁷
- Many more articles than Encyclopedia Britannica⁸
- Up-to-date, many articles are constantly revised for clarity
- Easily accessible (250+ languages), organized, hyperlinked
- Strong sense of ethics and rules about making contributions⁹
- Keeps a history of all edits and discussions
Free articles from persons who enjoy the topics they write about and want to effectively share their knowledge with others.

It can help us focus on creating credibility through references (reliable sources). Perfect for getting people to think critically about truth, authority, bias.

Let me also point out that since March 2007, Wikipedia is no longer growing exponentially, and people have different theories about why that is so—I’ve footnoted quotes from articles on that for persons who want to explore this more.

I. A Wikipedia world

“It works in practice but not in theory.”—popular saying among Wikipedians

So just what is Wikipedia? As of today (Dec. 9, 2009) here’s a quick rundown:

The free [online] encyclopedia anyone can edit.
Most frequently used encyclopedia in the world.
Effort to “codify all human knowledge.”
Launched in 2001 by Jimbo Wales and Larry Sanger.
Succeeded Nupedia (Mar 2000-Sept 2003), a volunteer-written Web-based free encyclopedia written by experts.
Named after wiki, the Hawaiian word for “quick.”
75,000 contributors, 10 million articles, 250 languages.
Participants include die-hards and “Good Samaritans.”
Made up of “primarily male techno-geeks.”
All changes are saved, and you can track who has made the changes…(IP addresses)
Built-in features that allow vandalism to be quickly corrected.
“Not a top-down model but a very Quaker-esque consensus model.”
“Wikipedians typically resort to binding votes after the failure of other options.”
It is one part of the non-profit Wikimedia Foundation.
Wikipedia employs two dozen employees with a $6 million budget.

There are a lot of popular sites on the web, but Wikipedia’s rise to the top (#6 as I write this) has been nothing but momentous. And they’ve had some help from another real powerhouse. Technology watcher Nicolas Carr mentions that Jorge Cauz, the president of Encyclopedia Britannica has called the tie between Wikipedia and Google "the most symbiotic relationship happening out there". Carr agrees. What follows is an experiment that he did over the past 3 years.

On August 10, 2006, Carr searched for the following terms on Google, and the Wikipedia page was in the top 10 for each of the terms:

World War II: #1
Israel: #1
He did it again on December 14, 2007:

World War II: #1
Israel: #1
George Washington: #2
Genome: #1
Agriculture: #1
Herman Melville: #1
Internet: #1
Magna Carta: #1
Evolution: #1
Epilepsy: #3

And in January of this year:

World War II: #1
Israel: #1
George Washington: #1
Genome: #1
Agriculture: #1
Herman Melville: #1
Internet: #1
Magna Carta: #1
Evolution: #1
Epilepsy: #1

As Carr said, “Yes, it's a clean sweep for Wikipedia.” As Annika Mengisen, author of the Freakonomics blog for the N.Y. Times, put it: “Wikipedia’s popularity continues to make standard encyclopedias look as hip as buggy whips.” And its influence only continue to grow, with Google’s help. A new algorithm now even “determines when Wikipedia topic pages are relevant to Google News.”

II. Starting with Wikipedia?

“Wikipedia is like a digital circus where the clowns are in charge of feeding the lions.” — Tara Brabazon
I called this presentation “Wikipedia: the Educator’s Friend (!)”. But, I’m a librarian, so can I really be serious about this?

http://www.indymedia.ie/article/85839?comment_order=asc

(One librarian in Washington state made a poster telling persons to “just say no” to Wikipedia – I’m not sure if the picture shown here is her design or not…)

Indeed, I have to concede Colbert’s point: there are some really legitimate gripes about Wikipedia (as well as about how people use Wikipedia). I’ll mention just a couple (you can read the rest in the footnotes): Jaron Lanier was not a film director but could not change the article about him that said he was (he kept getting overruled). Why? Because he did not have a verifiable source to point to! It was only after he complained about his situation in his article published on Edge.com, “Digital Maoism”, that he could change that false information. Another very big gripe, of course is that, Wikipedians do not defer to expert authorities. They, as they say, are “anti-credentialist”, “[playing] the ball and not the man – meaning that users evaluate “the merits of each edit and not the particular personality behind it”. So 14-year olds and tenured professors are treated as equals. This of course is going to rankle many who are already concerned about the decreasing respect for educational and other expert authorities.

At the same time, Wikipedia, among many other “Web 2.0 tools”, is among the chief sources students are using. And the horse does seem to have left the stable. For instance, according to a recent Pew poll, not only do 61% of American adults seek health information online, but 50% of doctors have used Wikipedia for health information. Wikipedia, along with Facebook, even recently briefed the Vatican. Wikipedia is the most cited website for social media users and bloggers, in front of YouTube and Flickr. And participation in these social information networks is becoming more the norm all the time (“We are the mainstream media”, Jimbo Wales recently said of Wikipedia). Arguably, speaking in general, students now view these social online sources the way many teachers once viewed print. The locus of authoritative print sources has shifted online.

In the past, teachers had more confidence about what kind of knowledge to pass on (or said disparagingly, the “gatekeepers” had more of a “top-down mentality”) – and students
probably more readily received it (to some degree). Now however, the question: “What is worthy of learning, and when and how shall we learn it?” is being increasingly asked by educators everywhere. And even those of us who think it is naïve to think that teachers are simply guides (or even just “fellow learners”!) increasingly feel as if teachers need to de-emphasize the fact that they are providers of knowledge (I’d argue they can not avoid being this). Will the “cult of the amateur”, as new media critic Andrew Keen calls it, be the downfall of us all?

I think that fears that the internet is turning us all into thoughtless lemmings that are running off a cliff are a bit exaggerated. Civilization and authority will survive. In the meantime, we should listen carefully when even Wikipedia’s critics say that “[it] is a very important fixture in modern intellectual life” and point out that it has succeeded in part because of the emphasis it puts on citing reliable sources. As the librarian Ellie Collier points out, “Condemning the Internet as a wasteland or a dangerous minefield when this is not the students’ personal experience only hurts our credibility.”

I submit that Andrew Lih, Wikipedian, and author of the recent book *The Wikipedia Revolution*, can help us get our bearings: “To the prospective journalist: there is no better place to start researching a story than Wikipedia, and probably no worse place to stop and use as a final word. In short, don’t do it. Wikipedia has helped you get your research started faster; don’t ruin your experience by using it incorrectly.”

I think this advice not only goes for journalists but should hold true for educators and students as well. In this presentation this morning, I’m trying to find a bit of a middle way.

**III. Demystifying, not banning, Wikipedia**
“Stephen Colbert...John Stewart...Borat...Somehow in a world of truthiness, where we select the truths we like, it has become too easy to dismiss ‘straight’ commentary and criticism. If it’s not fake, we don’t believe it.”—Dick Meyer

Unless, of course, that commentary and criticism is found in Wikipedia, which, to say the least, has gained a surprising bit of attention and respect. Perhaps this has something to do with new media watcher David Weinberger’s quip that “transparency is the new objectivity”.

So how is Wikipedia written anyway? We know that the history of each edit is saved, but according to what rules do persons create and edit those articles? And how might we determine if using Wikipedia for research might be helpful? If we look at some of the basics about what makes Wikipedia tick, perhaps we might start to get a better idea how it could be a useful.

First, a little background on Wikipedia’s three core policies (these trump “guidelines”), which are the most significant part of its “Five Pillars”. The three core policies are: 1) neutral point of view, 2) verifiability, and 3) no original research. To say that “articles must be written from a neutral point of view” means that all “significant” views must be represented fairly, proportionately, and without bias. “Verifiability” means that “material likely to be challenged, and all quotations, must be attributed to a reliable, published source” (like peer-reviewed journals and books published in university presses, university-level textbooks, magazines, journals, books by respected publishers, mainstream newspapers and electronic media). “No original research” just means that any original acts, assertions, arguments, theories, ideas, opinions, speculations, analysis and synthesis need to be published in reliable sources first (it doesn’t matter how respected you are in your field).

Using these three core policies (and others, though less so), Wikipedia strives to give the reader a sense of the shape of – or a fair characterization of – disputes about topics. In other words, it helps us locate the views among experts that are seriously influential and compete in the marketplace of ideas. Wikipedia believes that by “describ[ing] disputes, [and] not “engage[ing] in them”, they can help create a “growing consensus over a neutral representation of information”, even as they freely admit that consensus over what constitutes this is not always possible. In short, they do not want to “leave the reader confused as to what the academic consensus on a subject might be.” And of course, in any discipline or area where there is claim to consensus about something, reliable sources themselves, and not Wikipedia editors, must be the ones speaking.

I think given the vision that is Wikipedia, this is actually pretty sensible (realistic), and it is more sophisticated than you might think. Wikipedia freely admits that no one is really without bias, but editors are to strive to understand and represent other’s views fairly (“who believes what, and why, and which points of view are most common”). Re: verifiability, they bluntly admit that “the threshold for inclusion in Wikipedia is verifiability, not truth.” Elsewhere, they talk about how viewpoints held by limited minorities do not belong in Wikipedia even if they are true and whether or not you can
prove it (except maybe in an “ancillary article”)\textsuperscript{74}. Re: original research, there is no ground-breaking stuff. They say, “If you are able to prove something that few or none currently believe, Wikipedia is not the place to \textit{première} such a proof.”\textsuperscript{75}.

Now, one can argue that \textit{in practice}, “truth on Wikipedia is received truth”: i.e., “something is true if it was published in a newspaper article, a magazine or journal, or a book published by a university press”.\textsuperscript{76} But we need to help people be more nuanced than that. I hope you might be getting an idea about how Wikipedia might be a useful springboard, for getting into things like research, considering the nature of authority and evidence, and helping us produce persuasive written and oral arguments. First let’s take a look at research.

IV. Beyond the “Information Triumvirate” (and “Algorithmic Authority”\textsuperscript{77})

[My students] imagined successful research to be what inspired the least negative reaction on my part, opting out of the deeper learning involved—Houman Harouni\textsuperscript{78}

Now, when it comes to searching, I *know* that if your students are like those I read about in the surveys, they already are expert searchers – so they consider themselves.\textsuperscript{79} When it comes to finding what they need, they feel they are doing pretty well finding useful sources: probably also pretty well regarding matters of critical thinking, detecting reliability, bias, understanding what footnotes are all about\textsuperscript{80}, etc, etc. I know, everybody picks on the kids: Johnny can’t read, write, add, concentrate, think, tell write from wrong, etc. (all book titles) – why insist to him that he can’t search either?\textsuperscript{81} So for now, so as not to be disagreeable, let’s pretend that they really are good searchers and go on to say: \textit{they can be even better}. They can even go beyond what Nicholas Carr calls the phenomenon of “Information Triumvirate”, the fact that:

- The medium of the internet (which stores and supplies information)…
- The search engine of Google (which dominates the navigation of the internet)…
- And the information source of Wikipedia (which dominates the results served up by Google)

…together increasingly dominate how we find things. In other words, many of us are increasingly dependent on this “Triumvirate”.\textsuperscript{82} If students consider themselves competent searchers, they may not like to admit that they actually need help, but I venture many (not all, certainly) also would not want to have an unhealthy dependency on these things…

It is possible that many of us are pretty confident of our search skills as well. I think there is a good reason for this: things like Google have made finding most of what we need for our daily lives incredibly easy. The “good enough” searching we often do – the basic hunting, gathering, and consuming – is taken care of with combinations of smart keyword searching, popularity ranking, and a good dose of common sense.

Still, consider this quote:
“Where lives or fortunes depend on it, complete accuracy still matters as much as ever. But for most everything else, the tradeoff point is moving toward faster, not deeper.”

“If what I want is a detailed episode-by-episode explication of the mysteries of the tv series Lost — just in order to satisfy my curiosity — Google, Wikipedia, etc serves my purposes. There are times, however, when “good enough searching”, or “satisficing”, is not enough. The “poor man’s research team” called Google may look good for this or that minor purpose, but when the important problems come, we want to get as much relevant information from known experts as possible, so we can analyze it and make informed decisions, and so we can speak in a convincing fashion to others. If we want to know how to go beyond the information triumvirate to do a “tough investigation search” or “serious exploration” - we need additional knowledge and research skills. And like all things worth teaching explicitly, this isn’t going to happen by osmosis.

But, let’s get there slowly, starting with Google, working up to things like Delicious, and finally ending with what libraries offer, including free access to high-quality, pay-to-play databases. In Wikipedia, we can find useful resources by using the cited links at the bottom of Wikipedia pages as a “jumping off” point for more effective web searching and research.

A. Advanced Googling (Algorithm-driven tools)

In J.R.R. Tolkien’s Lord of the Rings trilogy, hobbits did not like to use tools if they did not understand how they worked. We, on the other hand, have become increasingly intellectually removed from the processes that benefit us, and seem to be in love with “black boxes”. It is clear to us that algorithm-driven tools like Google can be of great help – perhaps especially when they draw on past “non-algorithm-driven” collections of resources (like Google Books).

To proceed, let’s take a quick look at the Wikipedia article on Microfinance. This is an interesting topic, because if you do a Google search for this topic, many of the top hits are actually arms of the microfinance industry. (also note that the Wikipedia article is the first hit in such a search).

Now, let’s say that you scroll down to the External Links, click there, and find this humanitarian organization called “The 100 Friends Project” that really interests you. From here, you can use Google’s “Advanced Search” screen, where you can “find pages similar to the page” and “find pages that link to the page”, and get all kinds of other sites that have a similar focus. I’m not sure if the “find pages similar” page uses algorithms or not, but I’ve consistently found the hits here to be quite relevant. Of course, using the Advanced Search screen you can also limit your searches to specific sites, domains (academic institutions for example), or geographic regions.

Now, let’s say that as you look at the article, you become aware of one of the founders of the European credit union movement in the nineteenth century, Friedrich Wilhelm Raiffeisen. And let’s say after reading his Wikipedia article, you decide you really need
to read up on him, and you’d even like to see what people said about him before the modern microfinance movement began. Another free web tool you can use here is Google Book search, as Google is scanning the library collections of respected universities and making available full-text books for titles before 1923 (sometimes with partial access to more recent books). For example, after entering “Friedrich Raiffeisen” (without quotes) and searching for books published up until the year 1970 in the Advanced search options, you will find a lot of full-text and limited access books that you can explore. Think about the ways that this tool might be useful: checking to see if a specific book covers something you’re interested in, finding which books cite that journal article you are interested in, or how a famous quote has been used. Even if you only get snippets of text, this is definitely a valuable tool.

B. Using Delicious (personally curated tools)

Another great way to gather information is to use personally curated tools like Delicious. You don’t have to be a Delicious user to take advantage of the personal collections of links thousands of users have created. For example, if you search for “The 100 Friends Project” here (or put in the url), you will pull up all the persons who saved this link, tagged it, and added it to their personal collection – provided they haven’t kept their collection private. Here we see that 14 people (4 +10) saved the homepage link and by clicking on the numbers, you can see how each of them tagged, or labeled the site, and explore what else they labeled in a similar way. And do a search for “Friedrich Wilhelm Raiffeisen” and check out user acer1701’s collection of Raiffeisen links! (there are over 300!). Chances are, you might find lots of people with common interests on this site, and this can make for some great serendipitous experiences. Again, there are lots of possibilities here (Also take a look at http://gnolia.com/ and http://www.diigo.com/).


C. Electronic Library for Minnesota / MNLink (professionally curated tools [library catalogs, databases])

I admit: even as a librarian, I sometimes I fall into the trap of thinking that if a search engine can’t find something, it’s not worth finding… This is not true. In addition, if you find an article you’d really like to look at behind a pay wall – whether it is a newspaper, magazine or journal piece – it’s worth trying to find it elsewhere.

Wikipedia says on its verifiability page that “verifiability” “does not… mean that any one can [check the cited sources] instantaneously, without any cost or effort”, and it goes on to mention the pay-to-play and print sources often freely available from libraries.… Actually, the vast majority of information on the web is actually invisible – there is a lot of stuff out there that is excluded by general purpose search engines, whose “spiders” only create an abridged and incomplete version of the web for us to search. This “invisible web” is sometimes called “the deep web” (see picture).
Let’s take a look at footnote number 32 in our Wikipedia “Microfinance” entry. Now, if we would like to look at a journal article that is not linked in Wikipedia for instance, we could check Google scholar, but what if the item is behind a pay wall? In this case, we can, for example, take a look at the Electronic Library for Minnesota, in which MN. residents can access the content of thousands of current and past magazines, newspapers and journals that are not freely available on the web.

Let’s check to see if any of the Electronic Library for MN. databases have access to the journal mentioned in footnote 32. First, we will go to the website elm4you.org and click on the “publication title list” link. Then, we will copy the title of the journal, “American Journal of Public Health”, and paste it in the search box. Clicking “search” shows us that several of the ELM databases have access to this journal during the date the article was published. Clicking on one of them, I will then proceed to go to the database’s homepage, click on advanced search, and drop the article’s title in the search box. From there I can pull up the article, and of course I can email it, save it, cite it, etc.

I also can check out the controlled vocabulary headings, and if I click on “Microfinance” this theoretically means that, I should be able to pull up every article in this database that is about Microfinance. There’s so much more you can do here, but we need to move on.

Speaking of libraries, there is also a good chance that you can freely access most of the books that you find cited in Wikipedia articles as well – in the good old-fashioned way – by getting the physical copies from libraries. Let’s say that, based on an Amazon review I saw earlier, I decide that the book, “The Economics of Microfinance” in the Bibliography looks like its worth checking out. If my local library system does not have the book, all I have to do is go to MNLinkgateway.org and do a search for it there, and chances are, one of the public or academic libraries in MNLink will have the book – and they do in this case. Of course, thanks to controlled vocabulary headings, if I click on “Microfinance” here, this again, theoretically means that, I should be able to pull up
every book in every participating MNLink library that is about Microfinance. In any case, to get the book, just press the “Get it” icon and quickly fill out the form (you’ll need a library card) in order to have it delivered to the closest library in your area. I should also point out that if the ELM databases don’t have an article you’re looking for (and you can find most recent newspaper articles in ProQuest newspapers by the way), you can also find out which libraries have a paper subscription to the periodical that contains it using MNLink (but I think you’d have to go there physically to get the article).

In short, here I’d like to point out some of the reasons why I think that the curated collections that libraries have – physically and electronically – might have an advantage over things you find on the web:

- Some of the top expert knowledge, past & present
  (writers get paid because they have the “know that” & “know how”)
- Variety of informed perspectives
  ([mostly] accurate facts, different *frames*)
- Enjoyable to read
  (well written, rhetorical skills)
- Eye to the “common good”
  (Respectful persuasion up, Name-calling down)
- Beyond algorithms, popularity
  (More powerful searching tools, controlled vocabularies, etc.)

Eventually, you and your students may even prefer to start here, not with Wikipedia. Probably not though.

D. Beyond the internet

Lastly, I should mention that some real “leather-foot” researchers point out how important it is to go beyond the internet entirely. In her book “Beyond the Internet”, Barbara A. Chernow, notes that most documents and resources in the collections of libraries and archives have not been digitalized and made available on the internet. She says that the “internet is the fast-food restaurant of research” and that “true research is not quick, and does not come with the click of a key or mouse.” Finally, she warns that “acquiring facts is becoming a replacement for learning and analysis. Instead of one source, the Internet is becoming the only source.” With that warning, let’s talk more about learning and analysis.

V. What’s really real

_I don’t think what is important is that the student use the best sources. What is important is that the student learn how to determine the best source._—Jeff Maehre (emphasis his)

I really like the sentiment behind that quotation. I think what it really lays out is that learning is forever a process – for all of us. No matter how much knowledge we have – whether we are mere babes or Renaissance men/women – we can always learn more.
This is one of the reasons why I think getting deep into the materials offered by things like ELM and library catalogs is so critical. There we can not only find things that connect with our current interests, but also hitherto unnoticed but related things that can captivate and fascinate us—and, as they draw us in, can assist us in becoming truly wise. In other words, we begin to increasingly realize that there is:

- Stuff we don’t know.
- Stuff we know we don’t know.
- Stuff we don’t know we know.
- Stuff we know but don’t know how to express.
- Stuff we don’t know we don’t know…

In short, these resources, with their great concentration of sources deemed to be reliable, can enhance our searching and learning, as they help us get deeper into the kind of expert knowledge that Wikipedia requires persons to cite. Now I’m certainly not saying that using things like libraries or ELM are the primary way that we can become persons of knowledge and wisdom, but I do think that being able to recognize that experienced persons we know have in turn recognized and given credence to the expertise of others is crucial in life.

Still—without help from libraries or databases that help sift a lot of the chaff for us, how can we determine whether what any particular source says is trustworthy? In other words, is it credible, reputable, authoritative…reliable? Now there are all kinds of ways that we can tell people to think critically about the information they find. Good “rules of thumb” are:

- Considered the source? (author/organization credentials, qualifications)
- Investigated bias? (ideologies, conflicts of interest)
- Peer reviewed? (i.e. fact-checking, analyzing arguments, etc)
- Triangulated the source? (find 2 other sources that support it)

Of course, being able to do this is again, a learning process. And, of course, part of the process involves realizing that these things are indeed rules of thumb (i.e. “generally speaking…”), and not iron-clad rules. In each case, varieties of contexts and purposes are important to consider, the fact that someone or something is reputable is not an infallible indicator, and exceptions abound. Finally, note that you could run a source through this checklist with someone—and it won’t necessarily help. That is because there is also an intractable personal element here…trust. (since none of us can actually overturn every stone to obtain all knowledge for ourselves, trusting others’ views about this or that is necessary). This complicates matters even further, as the social media theorist Clay Shirkey illustrates in a highly compelling fashion:

“Khotyn is a small town in Moldova. That is a piece of information about Eastern European geography, and one that could be right or could be wrong. You’ve probably never heard of Khotyn, so you have to decide if you’re
going to take my word for it. (The “it” you’d be taking my word for is your belief that Khotyn is a town in Moldova.) “Do you trust me? You don’t have much to go on, and you’d probably fall back on social judgment — do other people vouch for my knowledge of European geography and my likelihood to tell the truth? Some of these social judgments might be informal — do other people seem to trust me? — while others might be formal — do I have certification from an institution that will vouch for my knowledge of Eastern Europe? These groups would in turn have to seem trustworthy for you to accept their judgment of me. (It’s turtles all the way down.) “Eventually, he goes on to say how this information he’s told us is wrong, but that Encyclopedia Britannica had gotten it wrong as well…"

This is extremely interesting to think about: what sources do we find convincing, and what are the various reasons for this — and what sources do others find convincing, etc.?

In relation to this, the superintendent of the district I’m a part of has said something that I think applies to this question. Susan Hintz believes trust is produced when others perceive that you a) care, b) are sincere (you say what you mean and mean what you say), and c) are competent (you know what you are talking about [i.e. have the relevant experiential knowledge] and have the necessary skills to deliver). Reliability, she says, is simply these three things over time. Now, we want people to trust and rely on our school districts. How does this all relate? Well, expert authorities, like school districts, want persons to rely on them and to trust them  — and we do to…generally.

This gets very tricky when we realize that while in general it is good to trust authorities when they speak to us about what is “established knowledge”, this is not totally the case. After all, we also want persons to ask challenging questions, exercise creativity, look hard at evidence, and use critical thinking… Of course, sometimes this brushes up against what is considered established knowledge.

The famous scientist Albert Einstein, operating within his academic, peer-reviewed worlds, radically re-framed the established scientific knowledge of his day, and influenced the world in ways so immense that they are hard to grasp. Einstein’s views — his reframing of generally known facts — was widely accepted rather rapidly within his field. On the other hand, when the journalist George Orwell, operating in the mainstream of his discipline, released his book 1984, it was panned by several of the most prominent thinkers of the day. Several years later, however, he was shown to be largely accurate about what he said, and he — and those who stood with him — were vindicated.

Maybe you have some of these Einsteins and Orwells in your classes. Don’t kill their unorthodox minds.

When your philosophically-minded student says: “Who determines the panoply of ‘significant’ and ‘relevant’ views? What makes sources ‘reliable’ and ‘reputable’?  …be patient with them. They have a point. When Wikipedia co-founder Jimbo Wales says that viewpoints held by significant minorities, i.e. those who have “prominent
adherents”, may be included in Wikipedia entries that cover the “shape of [a] dispute”, it is, at times, not unreasonable to wonder about the subjectivity involved in determining what is a “significant minority view” and what is “an extremely small (or vastly limited) minority” [i.e. wholly insignificant to the question of what the “shape of disputes” looks like]. Although in their policy Wikipedia sensibly strives to reflect the views of “established sources” they at least implicitly acknowledge that establishment views can be wrong.

Of course, even as we must admit this to be the case, it might seem that we are opening up a big door here… After all, our age is awash in conspiracy theories, in which people commonly cherry pick facts they like, ignore others, distort others, and go on to weave compellingly produced yarns that might – on the face of it – sound pretty convincing. In these accounts absolutely everything is about gatekeepers, power, money, privilege, “old boy’s clubs”, and keeping down this or that group – all things we know certainly do play a key role in life. Of course, one of the main problems about these theories, among other things, is that they seem to say that most, if not all sources of establishment knowledge are intentionally deceptive, kind of like Lewis Carroll’s Humpty Dumpty. One of Humpty Dumpty’s characteristics is that he sees words merely as “malleable power tools” for accomplishing his purposes:

“When I use a word,” Humpty Dumpty said, in a rather scornful tone, “it means just what I choose it to mean — neither more nor less.”

"The question is,” said Alice, “whether you can make words mean so many different things.”

"The question is,” said Humpty Dumpty, “which is to be master — that’s all.”

http://www.sabian.org/Alice/lgchap06.htm

If one cynically embraces the notion that this is largely what established experts and authorities do, it would be easy for some to conclude “then I will fight fire with fire”,

...
leading to an embrace of the art of rhetoric without a corresponding concern to be truthful. On the other hand, if one thinks that such practices are wrong, believing we must be concerned to speak truthfully (i.e. there really is something important to the notion of “speaking truth to power”) perhaps Wikipedia is a place one can get started with this as well.

VI. Practicing sharing knowledge persuasively

“Wikipedia is the first place I go for knowledge, or when I want to create it”\textsuperscript{114} --Steven Colbert

We’ve covered using Wikipedia as springboard into research and discussions of the nature of authority and evidence. Now we are at the part concerned with producing persuasive written and oral arguments. As Darren Crovitz and W. Scott Smoot put it in their article, “Wikipedia: Friend, Not Foe”: “Wikipedia provides a unique opportunity to get students involved in ongoing conversations about writing for a real audience, meeting genre expectations, revising for clarity and purpose, and entering into public discussions about the nature of truth, accuracy, and neutrality”\textsuperscript{115} –This involves using “the Wikipedia entry not as a source of truth but as a springboard to further inquiry”.\textsuperscript{116}

Of course, we all hope that students will be able to effectively analyze what others say, think critically about it, synthesize it, and solve problems with their knowledge. And unless you are intent on practicing sophistry, being able to solve problems involves being able to convince people you have a good answer in an intelligent, open, and honest fashion.

So how to get started?

After looking at the practical issues of how to use Wikipedia and doing so one’s self, we can then start by introducing our students to the site (I don’t want to minimize the challenge here, as this presentation is not about this, but the links footnoted here may help\textsuperscript{117}). Crovitz and Smoot recommend starting with a familiar topic, brainstorming as a class about what they know on that topic, and comparing what they say with what is in the Wikipedia article on that topic. From here, students may be able to identify gaps in the articles where fresh research might be possible (like stuff we don’t already know or stuff that makes us ask more questions\textsuperscript{118}, \textsuperscript{119}

They also have the following ideas about contributing to Wikipedia: starting new articles from scratch\textsuperscript{120} (being careful not to do original research), copyediting for grammar and punctuation\textsuperscript{121}, adding hyperlinks and citations (“verifiability”), improving the style of the article (see here\textsuperscript{122}), etc. Doing these things with articles relevant to your class or even on topics the students are passionate about (people they admire and know a lot about, or novels that they have read, for example), are ways to get the feel for Wikipedia and to dive in.\textsuperscript{123} Finally, start small, they say.
And what will teachers and students find when they dive in? Wikis by their very nature are unlike traditional sources that imply ultimate authority and a fixed sense of knowledge: they invite questions, alternative perspectives, critique, or debate. They “invoke a more synthesized relationship. Readers (who may also be writers) are expected to act critically by evaluating assumptions, evidence, and context in order to measure worth and (possibly) respond. Writers (who are likewise readers) must in turn expect to justify, support, and document their statements, as well as to engage with the questions and critique of readers.” In other words, students may, somewhat ironically, need to argue effectively in order to collaboratively create “non-argumentative”, or “unbiased” encyclopedia articles. They will get a sense about what kinds of statements they might consider accurate but others may be inclined to doubt. As Jeff Maehre says, “students [will] enter a turbulent environment where every syllable has to be defended by people with no authority over anyone else, where no editor has final say.” (theoretically, at least)

It is during the course of such conversations that students can better learn to ask critical questions that will help them increase in knowledge and understanding like:

- What do you mean by that?
- How did you come to that conclusion (i.e. what are your reasons for coming to that conclusion)?
- Have you considered…?

Being in conversations with others about topics of interest to them and learning from these can be an exciting and challenging experience. Of course, there will be other challenges as well. Perhaps the student, trying to fill gaps, will make an article too long, given the topic’s notability. Maybe they will find themselves frustrated by some of the guidelines in Wikipedia, as they experience “Wiki-lawyering” from Wikipedia administrators. Or perhaps they will find it difficult to not create “original research”, as Wikipedia is really a place to learn how to express what others have already done in a winsome, fair, and convincing way. Finally, maybe they will find out that their knowledge about a topic may be lacking. Whatever the case, I think getting engaged this way can be rewarding… They will be challenged to understand the views of others, to learn from them, and to state them in a way that those disagreeing with them will construe as fair. In other words, they can learn how to debate in a civil and constructive fashion.

There are many creative assignments that can be done with Wikipedia, and Wikipedia has a page devoted to this called Wikipedia:school, where you can see what many teachers are doing. There have also been some very helpful articles written by teachers as well that have been published in journals (see recommended resources). One of these teachers wrote about her college level history class’ experience with Wikipedia. She writes about how exciting it was for her students to engage in actual historiographic debate – or as she put it “contributing to high-stakes historical discourse…” with a high-stakes audience much larger than their in-class group – on the talk (“discussion”) pages of Wikipedia. She says, “the discussion page of Wikipedia offers an opportunity for
students to demonstrate through historiographic discussion that they have sifted through the relevant scholarship in order to offer the closest ‘truth’ possible.” Overall, her class found it to be a tremendous experience. Let me share with you some of the feedback she received from the assignment evaluations her students filled out:

Some had fear regarding the higher stakes:

- "intimidating"
- "disliked the idea that [they] might have to erase or change another person's Wiki offering. Scary."
- did not want to choose "something that would be attacked right away"
- expressed concern about "not upsetting others who had written on the same topic"

Others talked about how much they learned:

- Another student perhaps summed up the stakes of the historical profession best, writing, "it is exciting to see if your addition survives."
- “…this assignment reinforced in me the importance of thorough research. I definitely did not want to put info on Wiki that I was not sure about."

And many noted the satisfaction the assignment gave them:

- "I felt like I had contributed to the scholarship of history”
- another wrote it was the most “personally rewarding” assignment they had ever completed in school.
- students loved the “new-ness” of the innovation, one writing "who has ever done that before in a class?"\(^{133}\)

Now how, exactly, does all of this help a student with their persuasive writing or personal rhetorical skills? After all, as Crovitz and Smoot say, “Wikipedians… may challenge students to revise or re-envision information that advocates or argues rather than informs.” It is after all, an encyclopedia, and students “may have trouble adopting the more formal, neutral voice appropriate for an encyclopedia (i.e., objective, expository, and nonpromotional).”\(^{134}\)

Well, we know that persuasive arguments must not only be credible (i.e. using reliable sources) but relevant. All writers have a purpose and audience in mind, and here, we too, must think of ours. I propose that if students are challenged to meet authentic, public needs, learning to present credible, relevant information to others so that they warrant inclusion in non-argumentative encyclopedia articles, they will have a leg up on doing this in argumentative contexts as well. As Maehre says, “In cases of non-argumentative essays, it shouldn’t be hard to see how relevance of information is applicable the same way it is in arguments”.\(^{135}\) In other words, assignments like this can be one helpful step in nurturing effective students of rhetoric who are also concerned with the nature of truth, accuracy, and neutrality. From here, you can jump into doing interesting research projects and papers, creative classroom debates, etc.\(^{136}\) Of course, you could always start
with these as well, and then perhaps contribute to Wikipedia, which I contend, has given us so much to work with.

Primary Bibliography (more citations are in endnotes)


   (http://inthelibrarywiththeleadpipe.org/2009/in-praise-of-the-internet-shifting-focus-and-engaging-critical-thinking-skills/). 30 Nov, 2009, On this show, Colbert also coined the term “Wikiality” in which he praised Wikipedia's adherence to the principles of "truthiness", which basically means gut feelings about truth tend to trump truth itself. For more clips of Colbert dealing with Wikipedia, see here:
   http://cconsinder.comedycentral.com/2009/11/02/colberts-best-wikipedia-moments/?xrs=rss_cconsinder It is because of Wikipedia can be edited by anybody that a former Encyclopedia Britannica editor said that

3 “When I was growing up you could read in the newspaper about the Vietnam War or Watergate but you never really got a deep history. I remember asking my parents, this Vietnam War thing, how did it start and what's going on? And they wouldn't have the time to explain it to me. Today, if a teenager were to say, can you tell me about what's going on, they would immediately go to Wikipedia. It has completely changed the way we consume the news.” Interview with Andrew Lih, author of *The Wikipedia Revolution* in Rossmeier, Vincent. “Are We Dangerously Dependent on Wikipedia?” *Salon*. Salon Media Group, 24 Mar. 2009. Web. 30 Nov 2009. (direct link: http://www.salon.com/books/int/2009/03/24/wikipedia/)


5 “I believe that the outlines of just such a mechanism are already emerging in the multifaceted development of what cyber-prophet, Mitch Kapor, recently dubbed “massively distributed collaboration.” Probably the single best example is Wikipedia, the free, on-line, user-edited encyclopaedia that in just over five years has become one of the most-visited sites on the web. I will have more to say about that in a moment…” Nicholson, Peter, " The Changing Nature of Intellectual Authority." www.arl.org. Association of Research Libraries, n.d. Web. 10 Dec. 2009. (direct link: http://www.arl.org/resources/pubs/mmproceedings/nicholson~print.shtml)


7 There is no small amount of debate among Wikipedians about what should and should not be included in an encyclopedia that is not limited by physical constraints. This is called the inclusionist-deletionist debate. Here is an excerpted quote from a response to a mainstream newspaper blog (something that Wikipedia would not allow) that defends the “deletionist view”: “Wikipedia is an encyclopedia, and this means we set high standards of quality for ourselves. One of the only rules actually set in stone for the project (as opposed to being created by the community) is verifiability, the principle that Wikipedia is a tertiary source wherein every fact should ideally be sourced reliably. If any one fact or whole article (including bios) cannot be sufficiently sourced, then they can and should be deleted. That is the promise of accuracy that we strive to, and deleting biographies that are unable to be properly sourced in the foreseeable future ensures that our content is useful…Information is only useful so long as it is reasonably accurate, and to allow articles to continue when they don’t have a reasonable chance of being accurate is to do a disservice to the millions of people who depend on Wikipedia….The other side is that organizationally, Wikipedia’s volunteers simply could not handle a site so big that included everything merely because it was potentially useful to someone, somewhere. To expect that an information resource would have no standards of
inclusion beyond plain usefulness is ignorant of the realities of what it means to build a finite resource.”

Comment found here: http://blogs.telegraph.co.uk/technology/shanerichmond/100002023/wikipedia-should-delete-the-deletionists/

Of course, the inclusionists would point out that more people are likely to volunteer if there are looser “notability” rules…

8 It is not uncommon for students to believe that you can find everything on Wikipedia.


9 There is a strong incentive to not let false edits live long. Misinformation and disinformation makes Wikipedia look bad and discourages contribution and use. As a colleague of mine says: “the amount of people who want to make Wikipedia good outnumber the ones who try to damage it”.

10 The linked resources are valuable and desired, not promotion of persons/institutions providing the resources.

11 Many, although not all of these points, I found in the presentation here:
http://www.slideshare.net/mjhasley/edtech-2009-using-wikipedia

12 Manjoo, Farhad "Where Wikipedia Ends." Time 174.12 (2009): 50-51. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009. Some key quotes: “But Wikipedia peaked in March 2007 at about 820,000 contributors; the site hasn't seen as many editors since. ‘By the middle of 2009, we realized that this was a real phenomenon,’ says Chi. ‘It's no longer growing exponentially. Something very different is happening now.’… Not only is Wikipedia slowing, but also new stats suggest that hard-core participants are a pretty homogeneous set--the opposite of the ecumenical wiki ideal… Chi's research suggests that the encyclopedia thrives on chaos--that the more freewheeling it is, the better it can attract committed volunteers who keep adding to its corpus. But over the years, as Wikipedia has added layers of control to bolster accuracy and fairness, it has developed a kind of bureaucracy. "It may be that the bureaucracy is inevitable when a project like this becomes sufficiently important," Chi says. But who wants to participate in a project lousy with bureaucrats?... There is a benign explanation for Wikipedia's slackening pace: the site has simply hit the natural limit of knowledge expansion. In its early days, it was easy to add stuff. But once others had entered historical sketches of every American city, taxonomies of all the world's species, bios of every character on The Sopranos and essentially everything else--well, what more could they expect you to add? So the only stuff left is esoteric, and it attracts fewer participants because the only editing jobs left are ‘janitorial’--making sure that articles are well formatted and readable…. Chi thinks something more drastic has occurred: the Web's first major ecosystem collapse. Think of Wikipedia's community of volunteer editors as a family of bunnies left to roam freely over an abundant green prairie. In early, fat times, their numbers grow geometrically. More bunnies consume more resources, though, and at some point, the prairie becomes depleted, and the population crashes...Instead of prairie grasses, Wikipedia's natural resource is an emotion. ‘There's the rush of joy that you get the first time you make an edit to Wikipedia, and you realize that 330 million people are seeing it live,’ says Sue Gardner, Wikimedia Foundation's executive director. In Wikipedia's early days, every new addition to the site had a roughly equal chance of surviving editors' scrutiny. Over time, though, a class system emerged; now revisions made by infrequent contributors are much likelier to be undone by élite Wikipedians. Chi also notes the rise of wiki-lawyering: for your edits to stick, you've got to learn to cite the complex laws of Wikipedia in arguments with other editors. Together, these changes have created a community not very hospitable to newcomers. Chi says, ‘People begin to wonder, “Why should I contribute anymore?”’--and suddenly, like rabbits out of food, Wikipedia's population stops growing…. [Chi says] ‘our data does suggest its existence in 10 or 15 years may be in question’… Wikipedia's troubles suggest the limits of Web 2.0--that when an idealized community gets too big, it starts becoming dysfunctional. Just like every other human organization.” The New Scientist also talked to Chi: “[Chi’s team of computer scientists at the Palo Alto Research Center in California] has found that occasional editors, those who make just a single edit a month, are finding it harder to shape articles. One in four of their changes is undone. In 2003, the "revert" rate was 1 in 10. The revert rate for editors who make between two and nine changes a month has grown from 5 per

13 “…traditionalists who say nothing good can come of something written by the masses in a chaotic manner, they turn their noses up and decry Wikipedia’s model on the grounds that the model cannot possibly work. To this, the community jokes: the problem with Wikipedia is that it works in practice but not in theory." Rossmeier, Vincent. “Are We Dangerously Dependent on Wikipedia?” Salon. Salon Media Group, 24 Mar. 2009. Web. 30 Nov 2009. (direct link: http://www.salon.com/books/int/2009/03/24/wikipedia/) (this is an interview with Andrew Lih, author of The Wikipedia Revolution)


19 “Wiki” is now the name for any website that allows many different users to easily add or change content.

“As expected, we find that registered participants, motivated by reputation and commitment to the Wikipedia community, make many contributions with high reliability. Surprisingly, however, we find the highest reliability from the vast numbers of anonymous ‘Good Samaritans’ who contribute only once. Our findings of high reliability in the contributions of both Good Samaritans and committed ‘zealots’ suggest that open source production succeeds by altering the scope of production such that a critical mass of contributors can participate.” (italics mine), Anthony, Denise, Sean W. Smith, and Timothy Williamson “THE CASE OF THE ONLINE ENCYCLOPEDIA WIKIPEDIA.” Rationality & Society 21.3 (2009): 283-306. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009. In addition, Jimbo Wales contended that “Wikipedia was actually written by ‘a community… a dedicated group of a few hundred volunteers’”, and cited evidence that “over 50% of his edits are done by just .7% of the users…524 people…And in fact the most active 2%, which is 1400 people, have done 73.4% of all the edits. The remaining 25% of edits, he said, were from ‘people who [are] contributing…a minor change of a fact or a minor spelling fix…or something like that’”. But Aaron Swartz, who heard Wales say this at Sanford (and notes that he had said this several times), analyzed several articles for percentage-of-text instead of number of edits and concluded that “the bulk of the original content on Wikipedia is contributed by tens of thousands of outsiders, each of whom may not make many other contributions to the site. The bulk of the changes to the original text, then, are made by a core group of heavy editors who make thousands of tiny edits (the 1400 freaks)” Blodget, Henry, “Who the Hell Writes Wikipedia Anyway?” The Business Insider: Silicon Alley Insider. The Business Insider Inc., 3 Jan 2009. Web. 10 Dec. 2009 (direct link: http://www.businessinsider.com/2009/1/who-the-hell-writes-wikipedia-anyway).


“As far as vandalism is concerned. Wikipedia is not quite the free-for-all that many fear, given its complex system of administrators (admins, bureaucrats, and checkusers), its ‘3R’ rule (limiting individuals
to perform no more than three reverts within in a 24-hour period), its arbitration and mediation committees, and its automated Wikibots that scan the site for ‘obvious vandalism... obscenities and evidence of mass deletions.’” Pollard, Elizabeth Ann "Raising the Stakes: Writing about Witchcraft on Wikipedia." History Teacher 42.1 (2008): 9-24. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009. Further, “What makes Wikipedia successful as a deliberative space, according to [Cass] Sunstein, is that ‘those who know the truth, or something close to it, are usually more numerous and more committed than those who know a falsehood.’” Infotopia: How Many Minds Produce Knowledge (New York: Oxford University Press. 2006), 152, quoted in the article above.

25 “There is thoughtful deliberation behind the management of millions of articles. This is not a top-down model but a very Quaker-esque consensus model.”, Rossmeier, Vincent. “Are We Dangerously Dependent on Wikipedia?” Salon. Salon Media Group, 24 Mar. 2009. Web. 30 Nov 2009. (direct link: http://www.salon.com/books/int/2009/03/24/wikipedia/) (this is an interview with Andrew Lih, author of The Wikipedia Revolution)

26 “…the mantras within the user community are ‘Wikipedia is not a democracy’ and ‘Voting is evil.’ The community values consensus and discussion rather than trying to set up California-style referendums. Wikipedians typically resort to binding votes after the failure of other options...The social contract of sorts is to ‘assume good faith’ when making first contact with users and strangers.” Rossmeier, Vincent. “Are We Dangerously Dependent on Wikipedia?” Salon. Salon Media Group, 24 Mar. 2009. Web. 30 Nov 2009. (direct link: http://www.salon.com/books/int/2009/03/24/wikipedia/) (this is an interview with Andrew Lih, author of The Wikipedia Revolution)

27 “The people at the Wikimedia Foundation have expressed that the recent economic downturn has been ‘challenging’ for fund-raising; but even in this financial climate, they have been receiving foundation grants and starting new initiatives. Also, small donations from Wikipedia users averaging around $20 per person during fundraisers bring in millions for the foundation, which is impressive.” Rossmeier, Vincent. “Are We Dangerously Dependent on Wikipedia?” Salon. Salon Media Group, 24 Mar. 2009. Web. 30 Nov 2009. (direct link: http://www.salon.com/books/int/2009/03/24/wikipedia/) (this is an interview with Andrew Lih, author of The Wikipedia Revolution). “Wikia” is a for-profit online venture started by Wikipedia founder Jimbo Wales, and like the surprise of Wikipedia, it recently surprised persons by turning a profit: http://www.siliconvalley.com/venture-capital/ci_13301665

28 “Before 2005, the budget was less that $1 million a year. This is quite fascinating for a site that was rivaled by Google, Microsoft and Yahoo in terms of influence on Internet traffic.” Rossmeier, Vincent. “Are We Dangerously Dependent on Wikipedia?” Salon. Salon Media Group, 24 Mar. 2009. Web. 30 Nov 2009. (direct link: http://www.salon.com/books/int/2009/03/24/wikipedia/) (this is an interview with Andrew Lih, author of The Wikipedia Revolution)


30 Speaking of Britannica, the Chicago-based company seems to be, surprisingly, doing pretty well these days: http://www.chicagotribune.com/news/chi-talk-keilman-britannicanov03.0,2766662.story

31 Carr, Nicholas. “All hail the information triumvirate!” [Weblog entry.] Rough Type. n.p. 22 Jan 2009. (http://www.roughtype.com/archives/2009/01/all_hail_the_in.php). 30 Nov, 2009. Also noteworthy is the following quotation from the Chronicle of Higher Ed: “AND GUESS WHAT COMES UP WHEN YOU TYPE ‘WIKIPEDIA’: Wikipedia is, like, really popular, according to an article in the spring issue of the quarterly journal Education Next. Michael J. Petrilli, a research fellow at the Hoover Institution, selected 100 terms from prominent U.S.- and world-history textbooks and typed them into Google. ‘The results are astounding,’ Mr. Petrilli wrote in the journal, which is published by Hoover. ‘Google listed Wikipedia as the No. 1 hit a remarkable 87 times out of 100. The encyclopedia came in second 12 times, and third once. In other words, the Wikipedia site was listed among the top three Google hits 100 percent of the time.’” Troop, Don. "Wiki-Inevitability, and Other Entirely Predictable Reports." Chronicle of Higher Education 55.9 (24 Oct. 2008): 6-6. EBSCO MegaFILE. EBSCO. [Library name], [City], [State abbreviation]. 3 June 2009 <http://search.ebscohost.com/login.aspx?direct=true&db=keh&AN=35382969&site=ehost-live>.

33 The following abstract talks about how persons interested in the “semantic web” are using Wikipedia to do “text mining” (Information retrieval) and data mining: “This article provides a comprehensive description of this work. It focuses on research that extracts and makes use of the concepts, relations, facts and descriptions found in Wikipedia, and organizes the work into four broad categories: applying Wikipedia to natural language processing; using it to facilitate information retrieval and information extraction; and as a resource for ontology building. The article addresses how Wikipedia is being used as is, how it is being improved and adapted, and how it is being combined with other structures to create entirely new resources.” Medelyan, Olena, et al. "Mining meaning from Wikipedia." International Journal of Human-Computer Studies 67.9 (2009): 716-754. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009.


35 Brabazon, Tara. Thinking Popular Culture: War, Terrorism, and Writing. Burlington, VT: Ashgate Publishing, Ltd., 2008, p. 52 (direct link: http://books.google.com/books?id=rhwqnd2LsmsC&pg=PA52&lpg=PA52&dq=%22Wikipedia+is+like+a+digital+circus+where+the+clowns+are+in+charge+of+feeding+the+lions.%22&source=bl&ots=cMEjrgxVIV&sig=-rSXl6E5bd6Cbk4nCmzBC5TAS0&hl=en&ei=hh0ZS4nCNpCoMnbOtOwC&sa=X&oi=book_result&ct=result&resnum=3&ved=0CA8Q6AEwAg#v=onepage&q=%E2%80%9CWikipedia%20is%20like%20a%20digital%20circus%20where%20the%20clowns%20are%20in%20charge%20of%20feeding%20the%20lions.%E2%80%9D&f=false)


38 As might be expected for such a daring experiment, controversy and Wikipedia have gone hand in hand. The journalist John Seigenthaler was “running a journalism institute at Vanderbilt and there was a rather short Wikipedia entry on him. He wrote a commentary for USA Today saying that, to his horror, he discovered his Wikipedia entry falsely claimed he was part of the conspiracy to assassinate John F. Kennedy... he said this shows you how terrible Wikipedia is. What good is the site if these types of things can crop up... That was a major crisis for Wikipedia. It was a very public embarrassment that this type of edit could last so long. And it highlighted something else -- that particular entry was written by someone who had not signed up for Wikipedia. It was an anonymous edit. So the only trace you had was this IP address. This led to a lot of soul-searching within the Wikipedia community.” (Rossmeier, Vincent. “Are We Dangerously Dependent on Wikipedia?” Salon. Salon Media Group, 24 Mar. 2009. Web. 30 Nov 2009. [direct link: http://www.salon.com/books/int/2009/03/24/wikipedia/] [this is an interview with Andrew Lih, author of The Wikipedia Revolution]) Another famous case has to do with the prominent Wikipedia editor

More recently, Wikipedia has also declared Ted Kennedy and Robert Byrd dead on Inauguration Day (Carr, Nicholas. “All hail the information triumvirate!” [Weblog entry.] Rough Type. n.p. 22 Jan 2009. [http://www.roughtype.com/archives/2009/01/all_hail_the_in.php]. 30 Nov, 2009.) ; banned the Church of Scientology from editing articles because of repeated and deceptive articles related to the religion http://www.wired.com/epicenter/2009/05/wikipedia-bans-church-of-scientology/; allowed the cover of the 1976 record album “Virgin Killer” on their web page, prompting the online watchdog IWF (Internet Watch Foundation) to block access to parts of Wikipedia in Britain (it was a “potentially illegal image of child sexual abuse”) http://www.channel4.com/news/articles/science_technology/wikipedia+may+challenge+iwf+ban/2877057. ; (then of course there are also more humorous incidents as well, such as baseball fans trash-talking back-and-forth before World Series games: "Burnett is about to get pasted by the Phillies in Game 2 of the 2009 World Series." And then there was this subsequent variation: "Burnett is currently waiting to be humiliated tonight by the Philadelphia Phillies." [http://www.myfoxphilly.com/dpp/news/scitech/102909_World_Series_Trash_Talk_Becomes_Wikipedia_Vandalism]). All of this is prompting continual changes like: Wikipedians to adopt a policy of Flagged Revisions, which requires edits of sensitive articles, including those on living persons, to be vetted by editors (Carr, Nicholas. “All hail the information triumvirate!” [Weblog entry.] Rough Type. n.p. 22 Jan 2009. [http://www.roughtype.com/archives/2009/01/all_hail_the_in.php]. 30 Nov, 2009. ). Incidents like this seem to have made Wikipedia reconsider its policies. Note this Time magazine quote from late Sept. 2009: “In the past, only articles on high-profile subjects like Barack Obama were protected from anonymous revisions. Under the new plan, people can freely alter Wikipedia articles on, say, their local officials or company head–but those changes will become live only once they've been vetted by a Wikipedia administrator. ‘Few articles on Wikipedia are more important than those that are about people who are actually walking the earth,’ says Jay Walsh, a spokesman for the Wikimedia Foundation, the nonprofit that oversees the encyclopedia. ‘What we want to do is find ways to be more fair, accurate, and to do better--to be nicer—to those people.’”, Manjoo, Farhad "Where Wikipedia Ends." Time 174.12 (2009): 50-51. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009. However, in an amazing incident of poor miscommunication, Jimmy Wales said that the comments made by Walsh above had been inaccurate, and that, “Wikipedia's ruling body of volunteers never decided to impose restrictions on all articles about living people. Instead, the site will adopt "flagged protection" — the new method for requiring editorial approval before changes to Wikipedia go up — for a small number of articles, most likely on a case-by-case basis.” Read more: Manjoo, Farhad “Jimmy Wales Quietly Edits Wikipedia’s New Edit Policy”, Time. Time Inc. 30 Sep 2009. Web. 8 Dec 2009. Despite Wikipedia’s return to its more free-wheeling ways, Nicholas Carr, in another article responding to N.Y. Times columnist Noam Coehn, reminds us that views of Wikipedia being completely decentralized (having an egalitarian-utopia nature) are clearly false. He
concludes, “So when [Noam] Cohen declares that ‘sidewalk-like transparency and collective responsibility’ are what ‘makes Wikipedia as accurate as it is,’ he’s not telling us the whole story. He's giving us the official Chamber of Commerce view.” “...[these pages on George Bush, Islam, Britney Spears, Sex, etc] are Wikipedia calls ‘protected,’ which means that only certain users are allowed to edit them. The editing of "semi-protected" pages is restricted to ‘autoconfirmed users’ - that is, users who have formally registered on the site and who pass certain thresholds for age and editcount - and the editing of ‘fully protected’ pages is limited to official Wikipedia administrators. (Another set of 'page titles' are under 'creation protection' to prevent them from being created in the first place.) Many of Wikipedia's most-visited pages are currently under some form of protection, usually semi-protection.” (Carr, Nicholas. “Potemkinpedia” [Webblog entry.] Rough Type. n.p. 22 Jan 2009. [http://www.roughtype.com/archives/2009/03/potemkin_village.php]. 30 Nov, 2009.) Finally, Wikipedia is considering using a software extension called “WikiTrust”, which is an algorithm that, when activated, would analyze the history of articles, highlighting content that has not been relatively stable in varying shades of yellow and orange (see "WikiTrust." Wikipedia, The Free Encyclopedia. 23 Oct 2009, 23:38 UTC. 13 Nov 2009 <http://en.wikipedia.org/w/index.php?title=WikiTrust&oldid=321666543> and http://www.wired.com/wiredscience/2009/08/wikitrust/; “Starting this fall, you’ll have a new reason to trust the information you find on Wikipedia: An optional feature called “WikiTrust” will color code every word of the encyclopedia based on the reliability of its author and the length of time it has persisted on the page.” Note however that the Wikipedia article on “WikiTrust” says Wikipedia is “considering” this change.

39 “Ireland Dublin university student Shane Fitzgerald posted a poetic but phony quote on Wikipedia” in order to test “how our globalized, increasingly Internet-dependent media was upholding accuracy and accountability in an age of instant news. His report card: Wikipedia passed. Journalism flunked… The sociology major's made-up quote - which he added to the Wikipedia page of Maurice Jarre hours after the French composer's death March 28 - flew straight on to dozens of U.S. blogs and newspaper Web sites in Britain, Australia and India. Fitzgerald said: 'I am 100 percent convinced that if I hadn't come forward, that quote would have gone down in history as something Maurice Jarre said, instead of something I made up,' he said. ‘It would have become another example where, once anything is printed enough times in the media without challenge, it becomes fact.’ So far, The Guardian is the only publication to make a public mea culpa, while others have eliminated or amended their online obituaries without any reference to the original version - or in a few cases, still are citing Fitzgerald's florid prose weeks after he pointed out its true origin (“Student Hoaxes World’s Media with Fake Quote” Eyewitness News 5. ABC Inc., WABC-TV/DT New York, NY. 11 May 2009. Web. 8 Dec 2009. [direct link: http://abclocal.go.com/wabc/story?section=news/technology&id=6807750]) On this incident also see: “THE PERILS OF WIKIPEDIA." New York Times Upfront 142.1 (2009): 5. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009. Evidently something similar – false quotes attributed to someone placed on Wikipedia and used by the mainstream media – happened even more recently surrounding talk radio host Rush Limbaugh’s bid to become an owner of the St. Louis Rams, THE WASHINGTON, TIMES “Rushing to revile Rush." Washington Times, The (DC) (2009): 20. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009. Others in academic contexts, have, like Fitzgerald, deliberately sought to perpetrate hoaxes on Wikipedia (see: http://info-fetishist.org/2009/01/03/discovery-and-creation-and-lies/)


Wikipedia is that it doesn't require you to have a PhD or to be a published author. You just have to know. If you don't, you're info won't last long." (Riedesel, Dustin. “Wikipedia: accurate enough for me” examiner.com. Clarity Digital Group LLC d/b/a Examiner.com. 7 July, 2009. Web. 8 Dec 2009/ [direct link: http://www.examiner.com/x-13637-Kansas-City-Social-Media-Examiner-y2009m7d7-Wikipedia-accurate-enough-for-me])

42 As Larry Sanger, Wikipedia co-founder says: “In a world in which so many people are consulting an encyclopedia “anybody can edit” for answers, the conventional wisdom, the accepted knowledge, seems less tethered to experts, exclusive institutions, and publications with professional gatekeepers. Even if knowledge itself has not changed, then how we as a society determine what we take ourselves to know might still have changed.” But the need for experts will not go away, Sanger asserts: “More plausible as a target for challenge is the epistemic leadership role. I do not offer an analysis of what this amounts to precisely. Nevertheless, I plausibly assume that various classes of certified professionals, and some others said to be ‘experts’ or ‘authorities,’ have a role in society of articulating what is known in their fields or industries. This is manifested in various ways. They are asked for comments by journalists; their research is cited in books; their findings and theories are taught in schools. When they speak about their areas of expertise, people tend to listen carefully and accord what is said more credibility. Students and those new to the field seek out their opinions and advice. I offer no further analysis of this role, but it seems plausible enough that there is a robust phenomenon here to discuss.” Finally, he says Wikipedia depends on experts: “… Wikipedi'a own policies actually reinforce the epistemic prerogatives of experts. And the regress of credibility suggests that this was bound to be the case: had Wikipedia not been committed to reporting information found in expert-vetted sources, it would surely not be as popular as it is." pp. 55, 60, 62 Sanger, Larry. "The Fate of Expertise After Wikipedia," http://www.larrysanger.org/, n.d. Web. 30 Nov. 2009. (direct link: http://www.larrysanger.org/FateOfExpertiseAfterWikipedia.pdf)

43 As noted in one of the latest studies on “information seeking behavior” of college students: http://projectinfolit.org/pdfs/PIL_Fall2009_Year1Report_12_2009.pdf

44 http://www.newscientist.com/article/mg20327185.500-should-you-trust-health-advice-from-the-web.html Also note, that the a Pew Report, published in Dec. 2007 found that “[m]ore people [58 percent] turned to the internet than any other source of information and support, including experts, family members, government agencies, or libraries’ to research problems such as a serious illness, school decisions, tax matters, changing jobs, or starting a business, and finding government programs such as Social Security, Medicare, and Medicaid.” (Estabrook, Witt, and Rainie, 2007: v, quoted in Devine, Jane, and Egger-Sider, Francine. Going Beyond Google: the Invisible Web in Learning and Teaching. New York: Neal-Schuman Publishers, Inc., 2009. Print.)


This of course, does not mean that we should not ask critical questions about how these tools might at times lead to deleterious effects. Media commenter Howard Rheingold, writing in the Britannica blog (http://www.britannica.com/blogs/2008/10/rip-lectures-notes-and-tests-scrapping-the-old-ways/), wrote in the comments section “Considering how much Facebook, blogs, Wikipedia, instant messaging, virtual communities, smart mobs are a part of the landscape that students need to live in, I think it’s important to do some reading, thinking, discussing, and arguing about the issues that arise from these media practices. (Note how I always try to ground my language in human agency — the issues arise from our practices, NOT just from the tools.)”

Bronstein, Phil “The whole truth, and nothing but -- now open for negotiation?” [Weblog entry.] Bronstein at Large. Hearst Communications, Inc. 10 Dec 2009 (http://www.sfgate.com/cgi-bin/blogs/bronstein/detail?entry_id=53290#ixzz0ZNrRSTTJ). Dec 10 2009. “Wikipedia gets more traffic, according to Wales, than CNN, BBC, New York Times, ABC, NBC and CBS combined. ‘We are the mainstream media.’”

Of course, there is this quote attributed to Socrates: “The children now love luxury; they have bad manners, contempt for authority; they show disrespect for elders and love chatter in place of exercise. Children are now tyrants, not the servants of their households. They no longer rise when elders enter the room. They contradict their parents, chatter before company, gobble up dainties at the table, cross their legs, and tyrannize their teachers.” http://www.bartleby.com/73/195.html

As opposed to those who adhere to the questionable practice of “teaching a received canon”. In truth, even if we emphasize that we are guides, guides must provide knowledge and depending on the kind of guidance needed, either seek to influence others, or make sure that they follow the right paths.

And while there may be some truth to this, I still think that the general idea behind having a strong, top-down-expert-driven, liberal-arts curriculum is sound, as I tend to assume that the subject matter of any field or discipline can be, to some degree, fascinating, interesting, and curiosity-arousing for any student, regardless of their background. This does not mean that there should be no real soul-searching about how to connect students current interests (current questions about issues regarding social cyberspace, for example) – what might matter most to them – to the topics that the teacher thinks they should be knowledgeable about. Further, I submit that the concept of knowledge involves continual conversation and reflection on content – and what that content is both stays stable in some regards, and in others, varies from age to age. Along with this, I also tend to track with Neil Postman, author of “Amusing Ourselves to Death”, who in this graduation speech, drew a contrast between “Athenians” and “Visigoths”, and made these statements: “To be an Athenian is to hold knowledge and, especially the quest for knowledge in high esteem…. To be an Athenian is to cherish language because you believe it to be humankind’s most precious gift… To be an Athenian is to understand that the thread which holds civilized society together is thin and vulnerable… To be an Athenian is to take an interest in public affairs and the improvement of public behavior… And, finally, to be an Athenian is to esteem the discipline, skill, and taste that are required to produce enduring art.”

“If the Web, through its links, and Google, through its search algorithms, have inadvertently set into motion a very strong feedback loop that amplifies popularity and, in the end, leads us all, lemminglike, down the same well-trodden path - the path of least resistance. You might call this the triumph of the wisdom of the crowd.” Carr, Nicholas. “All hail the information triumvirate!” [Weblog entry.] Rough Type. n.p. 22 Jan 2009. (http://www.roughtype.com/archives/2009/01/all_hail_the_in.php). 30 Nov. 2009.

55 Collier, Ellie. “In Praise of the Internet: Shifting Focus and Engaging in Critical Thinking Skills.” [Weblog entry.] In the Library with the Lead Pipe. n.p. 07 Jan 2009. (http://inthelibrarywiththeleadpipe.org/2009/in-praise-of-the-internet-shifting-focus-and-engaging-critical-thinking-skills/). 30 Nov, 2009. Another librarian, writing on the ACRLog, indirectly confirms this judgment, stating “I do not really know what to do, except briefly repeat the same old message about how it is generally a good thing to use sources from the college’s library, about how these are the sources instructors expect students to use, and unless I am questioned not be too specific about if and why they are ‘better.’ I am not so far down the libraryland rabbit hole that I imagine I will get a round of applause if I say “You should use the library because the library is on your side. The college library wants to provide you with high quality sources for your research. Our agenda is clearly stated. We do our best to provide an additional level of editorial process by reading reviews and making informed decisions for what should be added to the collection, and beyond that we are trying to make as much of it as possible accessible from home.” “Explaining authority” ACRLog. ACRLog. 13 May 2009. Web. 8 Dec 2009 (direct link: http://acrlog.org/2009/05/13/explaining-authority/)


59 Core policies are arrived at by consensus, but there are exceptions, for example: “Declarations from Jimbo Wales, the Wikimedia Foundation Board, or the Developers, particularly for copyright, legal issues, or server load, have policy status.” http://en.wikipedia.org/wiki/Wikipedia:Consensus, Accessed Oct. 30, 2009. Also see here: http://www.mndaily.com/2009/11/18/wikipedia-will-set-you-free-if-it%E2%80%99s-true


61 Here is a sample of advice from the NPOV page: “In attributing competing views, it is necessary to ensure that the attribution adequately reflects the relative levels of support for those views, and that it does not give a false impression of parity. For example, to state that “according to Simon Wiesenthal, the Holocaust was a program of extermination of the Jewish people in Germany, but David Irving disputes this analysis” would be to give apparent parity between the supermajority view and a tiny minority view by assigning each to a single activist in the field.” http://en.wikipedia.org/wiki/Wikipedia:Neutral_point_of_view/, accessed Oct. 28, 2009.

62 Good quote: “If no reliable, third-party sources can be found for an article topic, Wikipedia should not have an article on it.” http://en.wikipedia.org/wiki/Wikipedia:Verifiability, accessed Oct. 28, 2009


They also add here, quite philosophically: "If there is anything possibly contentious about the [NPOV] policy along these lines, it is the implication that it is possible to describe disputes in such a way that material from all reliable sources is presented comprehensively and neutrally. Whether this is possible is an empirical question, not a philosophical one." (italics mine) I take some issue with that last sentence, believing that doing this is something that we should strive for, although we will never be able to know with any real certainty if we have really reached this goal. Jim Wales says that “[a]n article is neutral when people have stopped editing it”. Quoted in Maehre, Jeff "What It Means to Ban Wikipedia." College Teaching 57.4 (2009): 229-236. EBSCO MegaFILE. EBSCO. Web. 12 Nov. 2009. Or, it could that one of the people arguing in the Wikipedia discussion pages has given up from frustration, exhaustion, or a lack of time to devote to Wikipedia.

Some may see something very sinister here. One of my friends wrote to me about Wikipedia saying that “consensus” and “neutral point of view” appeared to be the central dogmas of [modern information science]”. He went on to say that he thought Marx “was nearer the truth in his belief that conflicts between points of view are ineradicable—until one eliminates all but one point of view, that being the politically correct point of view.” In other words, he is talking about the idea that harmony, or consensus, can only be achieved by acts of political suppression. Given my knowledge of human nature, I have some real sympathy with this critique. Often, persons seem to have their biases and worldviews and are not open to new evidence, and act to crush those they perceive threaten them. And yet, I think the crucial point here is that all of us can act a bit like ideologues given this or that topic: perhaps what is more important is what kind of ideologues we are? I think the idea of trying to find consensus and trying to really understand the views of others (“walk a mile in their shoes”) is not only noble, but also, all that we are left with if we want to remain reasonable. After all, even if we think Marx is on to something, it does not mean it should be pursued. After all, after you have eliminated “all the views” that disagree with you, is it not naïve, given human nature, to think that among the remaining “pure” folks that you will not have great disagreements?

“In cases where consensus is difficult, independent or more experienced editors may need to join the discussion. If edit wars or disruptive editing impede the editing of a page, or if consensus is impossible, formal dispute resolution is available.”, “Consensus develops from agreement of the parties involved. This can happen through discussion, editing, or more often, a combination of the two. Consensus can only work among reasonable editors who make a good faith effort to work together in a civil manner. Developing consensus requires special attention to neutrality and verifiability in an effort to reach a compromise that everyone can agree on.”

Wikipedia admits that those sources it considers valid are those that are verifiable, not necessarily true.


For more information about what the studies say about student searching, I recommend chapter 2 (particularly p. 23 and 24) of the book “Going Beyond Google: the invisible web in learning and teaching” by Jane Devine and Francine Egger-Sider (Devine, Jane, and Egger-Sider, Francine. Going Beyond Google: the Invisible Web in Learning and Teaching. New York: Neal-Schuman Publishers, Inc., 2009. Print.). More on this: “In fact, our assumptions about the technological abilities of our youth in general may need a rethink. A British study released in 2008 found that ‘the majority of young people tend to use much simpler applications and fewer facilities than many imagine’ (University College London CIBER Group, 2008, p. 18), and ‘the wider availability of technology and the near blanket exposure to it in recent years does not appear to have improved search performance in any significant way’ (p. 22).’ See also: Badke, William "Stepping Beyond WIKIPEDIA." Educational Leadership 66.6 (2009): 54-58. EBSCO MegaFILE. EBSCO. Web. 3 Nov. 2009, where we learn “A 2003 Canadian survey of 3,000 incoming university freshmen found that most included inessential words in searches; used the Boolean operator "or" incorrectly; could not identify the characteristics of scholarly journals; could not distinguish between library catalogs and bibliographic databases; and had difficulty identifying journal article citations, knowing when to cite sources, and evaluating Web sites (Mittermeyer & Quirion, 2003). These recent high school graduates' information skills left them unprepared for further academic work.” (the study referred to is this one: Mittermeyer, D., & Quirion, D. (2003). Information literacy: Study of incoming first-year undergraduates in Quebec. Montreal: Conférence des Recteurs et des Principaux des Universités du Québec. Available: www.crepuq.qc.ca/documents/bibl/formation/studies%5fAng.pdf, also mentioned in this article) Also, see Wang, Y. M. E., & Artero, M. E. (2005). Caught in the Web: University student use of Web resources. Educational Media International, 42(1), 71-82.

As Rold Norgaard makes clear, teaching about citation “to avoid plagiarism” is the real crime. Citations are used as aids to framing questions, establishing currency and credibility, advertising allegiances, and exploring disagreements and open questions. One author has even written a whole book on the history of the footnote, and here is a relevant comment from a reviewer: “The history, use and meaning of the footnote is a rather unlikely subject for a book, however, Grafton uses it to focus on the practice of history and the flesh-and-blood jealousies, mistakes and falsehoods which lie behind even the driest of academic pursuits.” (-reviewer at Amazon.com: http://www.amazon.com/Footnote-Curious-History-Anthony-Grafton/dp/0674307607). Jeff Macbre talks about the experiences of Dr. Robert Regino, an English teacher at the University of Hartford who used Wikipedia in class: “One of Reginio’s key goals for this assignment was for students to see the assumptions they’d made concerning the topic of their choice, and to see that many ‘facts’ are really interpretations—in short, the ‘knowledge creation’ process. One of the effects was that students saw that seemingly not ‘serious’ topics (one student surfed to an entry for Anna Nicole Smith) were subject to very rigorous debate, with ubiquitous calls for citations of facts. Not only did this, in Reginio’s view, show students why (as opposed to that) citations are important in their own work, but it actually dramatically improved the formatting of their citations during the balance of the semester. (personal communication, April 18, 2008). Reginio concluded that seeing so many people haggle over citations did what countless exhortations from an instructor never could. Incidentally, many students concluded the assignment finding Wikipedia far too vulnerable to inaccuracies or disputes and changes and


82 “…what we seem to have here is evidence of a fundamental failure of the Web as an information-delivery service. Three things have happened, in a blink of history's eye: (1) a single medium, the Web, has come to dominate the storage and supply of information, (2) a single search engine, Google, has come to dominate the navigation of that medium, and (3) a single information source, Wikipedia, has come to dominate the results served up by that search engine. Even if you adore the Web, Google, and Wikipedia - and I admit there's much to adore - you have to wonder if the transformation of the Net from a radically heterogeneous information source to a radically homogeneous one is a good thing. Is culture best served by an information triumvirate?” Carr, Nicholas. “All hail the information triumvirate!” [Weblog entry.] Rough Type. n.p. 22 Jan 2009. (http://www.roughtype.com/archives/2009/01/all_hail_the_in.php). 30 Nov, 2009.


85 Librarian James Weinheimer (of the American University in Rome) – this is a phrase he has used repeatedly on the NGC4Lib list serve.

86 Of course, if the following recent study is to be believed, some may say why bother?: “Humans prefer cockiness to expertise”, http://www.newscientist.com/article/mg20227115.500-humans-prefer-cockiness-to-expertise.html. Here we must ask the question: who are you trying to persuade? Your friends? Or persons in positions of authority who tend to be a bit more skeptical of cocky people and their claims?

87 I think that what is really important is real-life evidence – as persons “on the ground” that are able and willing help make the facts they discover meaningful to us (here, don’t think [initially at least!] along the lines of “Meaning of life”, or “coherent worldviews”, or even “meaningful in a scientific sense”, but rather think first of all about a court of law for instance, where in the course of testimony and cross-examination pieces of evidence often come together, and skilled persons can help people arrive at conclusions that are less or more tentative, causing us to speak of things like “evidence beyond a reasonable doubt”… even if we may want to avoid [and sometimes juries do this!] the conclusions) – In other word, they help things “make sense” to us (become meaningful). They can help us see the wider context of particular facts, and also how some facts might even be understood differently given this or that angle / perspective / frame (or how other facts might alter the whole picture!).


89 Here is what gave me the idea for the strategy in this section of the paper: “The goal here is to show students how to gather the same resources that support the Wikipedia entry. This helps expose the searcher to the wide variety of quality material contained in the library including the physical collection, electronic resources, and inter-library loan services (for resources not contained in the user’s home collection). It also gives the librarian a chance to explain how this content is different from what one might find with solely a Google search.” Bennington, Adam "Dissecting the Web through Wikipedia." American Libraries 39.7 (2008): 46-48. Health Source: Nursing/Academic Edition. EBSCO. Web. 25 Nov. 2009.
“I’d also argue we should step back and make sure we carve out time to have conversations with students around questions like “what is peer review in the first place?” “What makes someone an ‘expert?’” “How does information get into Wikipedia?” “Why exactly do you see those messages to buy an article through Google Scholar?” These concepts are directly tied to critical thinking and lifelong learning.” Collier, Ellie. “In Praise of the Internet: Shifting Focus and Engaging in Critical Thinking Skills.” [Weblog entry.] In the Library with the Lead Pipe. n.p. 07 Jan 2009. (http://inthelibrarywiththeleadpipe.org/2009/in-praise-of-the-internet-shifting-focus-and-engaging-critical-thinking-skills/). 30 Nov, 2009


This list was inspired by the scientist-turned-philosopher Michael Polanyi (his most well-known work is a book called Personal Knowledge, published in 1958) who famously said that “we know more than we can tell”. He also said that knowledge is fundamentally personal (i.e. it is “subjective” in this sense) and that true knowing involves...”passionate and personal commitment.” In other words, since knowledge is personal, we must speak of “personal knowledge“, "embodied knowledge“, "knowledge as performance“, etc. At the same time Polanyi taught that increased “objectivity” is the accomplishment of personal subjects, who, having been guided apprentices, willingly dedicate themselves to making contact with the external world.

A poster on the ACRLog (“Explaining authority” ACRLog. ACRLog. 13 May 2009. Web. 8 Dec 2009 [direct link: http://acrlog.org/2009/05/13/explaining-authority/]), geny150, wrote, I think wisely: “I think authority relates primarily to the source’s knowledge base. This is why a research article in a peer-reviewed journal has more authority than an article in a popular magazine. The author of the former has collected (and, we hope, read) previous works on the topic to inform himself and his opinions/hypotheses, and he has gone through the vetting process of having his article approved for publication by a number of other knowledgeable (again, we hope) scholars. His reputation as one of authority relates to his accumulated knowledge, as well as the knowledge of those willing to vouch for him. The reporter in a popular magazine, on the other hand, can only relay the information provided to him by his sources (which could be one or several people), and so the authority of that article can only be as strong as the knowledge of the people providing the information. (This is also why we might give more credit to a NY Times article than one from a small-town newspaper, because the NYT has greater access to those with more knowledge, presumably.)…It’s kind of like this. If I was going to choose a contractor, I would ask friends who have had work done on their house, because they have more knowledge of that area than my renting buddies who have not run into this issue, thereby giving my home-remodeling friends more authority. (This is probably also why Mom & Dad seem wiser as we get older!) In conclusion, knowledge = authority.”

A current checklist uses the acronym “CARS” (Credibility, Accuracy, Reasonableness, Support): Credibility - Trustworthy source, author's credentials, evidence of quality control, known or respected authority, organizational support. Goal: an authoritative source, a source that supplies some good evidence that allows you to trust it / Accuracy - Up-to-date, factual, detailed, exact, comprehensive; audience and purpose reflect intentions of completeness and accuracy. Goal: a source that is correct today (not yesterday), a source that gives the whole truth / Reasonableness Fair, balanced, objective, reasoned, no conflict of interest, absence of fallacies or slanted tone. Goal: a source that engages the subject thoughtfully and reasonably, concerned with the truth ; Support - Listed sources, contact information, available corroboration, claims supported, documentation supplied. Goal: a source that provides convincing evidence for the claims made, a source you can triangulate (find at least two other sources that support it).” Source: From “Evaluating Internet research sources,” by Robert Harris, 2007, Virtual Salt. Available: www.virtualsalt.com/evalu8it.htm; Badke, William "Stepping Beyond WIKIPEDIA." Educational Leadership 66.6 (2009): 54-58. EBSCO MegaFILE. EBSCO. Web. 3 Nov. 2009.


“… if you want to know the NRA’s stated position on gun control there’s no better place to go than the NRA website. If you want to know the statistics of children killed by their parents’ guns, I wouldn’t get it there. Another example: if you’re writing on Star Trek culture or the phenomena of fan fiction you would absolutely want to use fan sites. Rather than focus on these fan sites as examples of non-authority we should be focusing on clarifying your purpose and identifying what types of sources would fit…. (Collier, Ellie. “In Praise of the Internet: Shifting Focus and Engaging in Critical Thinking Skills.” [Webblog entry.] In the Library with the Lead Pipe. n.p. 07 Jan 2009. [http://inthelibrarywiththeleadpipe.org/2009/in-praise-of-the-internet-shifting-focus-and-engaging-critical-thinking-skills/]. 30 Nov, 2009)

Here’s a recent and very interesting exception from Wikipedia itself dealing with ethical issues: http://www.guardian.co.uk/technology/2009/jul/08/wikipedia-censorship-seth-finkelstein

“For example, suppose I've found a Web site on the origins of World War I: www.firstworldwar.com. To evaluate it using the CARS checklist (see a few footnotes above), I first look at credibility. What is www.firstworldwar.com, and who is behind it? I find a linked name, Michael Duffy, at the bottom of the page and click on it. This takes me to an "About This Web Site" page, where I find a recommendation that the material not be used for academic research because it has not been peer reviewed. Mr. Duffy does not provide his qualifications….Then I look for accuracy. Although not updated since 2006, the site does appear to have factual information. On reasonableness, the site is even-handed, not prone to talking about conspiracies, and not taking only one side on issues. Finally, support. Although most articles on the site lack footnotes and bibliographies, there is an extensive collection of primary sources — actual documents, posters, and so on from the World War I era. The feature articles have bibliographies…My verdict? Although not peer reviewed, this site appears to be a reasonably reliable source for information, especially for primary source material. It is therefore usable with care and discretion, but not for higher-level academic work.”; Badke, William "Stepping Beyond WIKIPEDIA." Educational Leadership 66.6 (2009): 54-58. EBSCO MegaFILE. EBSCO. Web. 3 Nov. 2009. A similar story is told by Ellie Collier: “While pursuing my MSIS, I wrote a paper entitled ‘Writing Forms and Usage During the Viking Age.’ Like every other student today, as part of my research process I did a Google search. I read Wikipedia entries. I also used the more encouraged sources, searching the library catalog and subscription databases, and browsing the shelves. This was an obscure subject and required a lot of digging. By far my most useful source was Vikinganswerlad.com. The Viking Answer Lady is Christie Ward. Her resume lists experience in computer science and web design, but no degrees and nothing related to viking studies. Our standard instruction would dismiss her site for not having an “about us” page and, after finding her resume, dismiss her as not an authority. Yet, reading through the site she is obviously dedicated, well read, and documents her sources…. from my bibliographic essay [7]: …For a more in depth study of Viking Age literacy, I was lucky enough to be pointed towards James E. Knirk’s ‘Learning to Write with Runes in Medieval Norway’ (Runica et mediævalia. Opuscula 2. Stockholm, 1994) and Aslak Liestøl’s ‘The Literate Vikings’ (Proceedings of the Sixth Viking Congress. Uppsala, 1971). These two articles in particular provided much of the serious analysis that was missing from the easy to find general information. They also provided a large number of attempted and partial translations of runic inscriptions that helped inform my summaries of
the various types extant… I was lucky enough to be pointed to those articles because I emailed Viking Answer Lady with my general thesis and asked her advice on where to look for more information. She might not fit the standard authority criteria that were established in the pre-Internet age, but I would argue she is most definitely an authority. Even if she is not an authority I would cite in a paper, she was an important step along the way of my research process... It is just as easy for dedicated hobbyists, gifted amateurs, independent scholars and the like to put up incredibly useful information. (Not to mention marginal voices that are often excluded from more traditional modes of public discourse.) More and more organizations are providing their services and expertise online. We should be encouraging our students to take advantage of these wonderful resources, not handicapping them by refusing, discouraging, blocking, filtering, or otherwise denying access…..” (Collier, Ellie. “In Praise of the Internet: Shifting Focus and Engaging in Critical Thinking Skills.” [Webblog entry.] In the Library with the Lead Pipe. n.p. 07 Jan 2009. [http://inthelibrarywiththeleadpipe.org/2009/in-praise-of-the-internet-shifting-focus-and-engaging-critical-thinking-skills/]. 30 Nov, 2009)

101 Should a person quote from Wikipedia? Not according to Wikipedia co-founder and head Jimbo Wales: "For God's sake, you're in college. Don't cite the encyclopedia.”. http://www.theorion.com/2.694/wikipedia-sucks-students-in-with-reliable-information-1.9222 . And yet, it really does depend: “…given the gift of our patience and the freedom and time to develop, [students] will increasingly be able to select quotations with nimbleness, understanding which help their arguments (or papers in other genres) and which contain various rhetorical features that may repel a reader. Thus, if deciding, for some reason to include a quotation from a Wikipedia entry, they would be making the choice with increasing measures of discretion and savvy… I think we are shortchanging students by not emphasizing quality, on the syllable-level, of sources, as opposed to quality on the level of the reputation of the journal the article appears in, the number of books the author has written, the prestige of her university, or her esteem in her professional community.” Maehe, Jeff "What It Means to Ban Wikipedia." College Teaching 57.4 (2009): 229-236. EBSCO MegaFILE. EBSCO. Web. 12 Nov. 2009. Jimbo Wales, founder of Wikipedia’s take?: This is one of the reasons I feel comfortable quoting this blog post about Wikipedia from a man named Hal O’Brien here: “The elephant in the room hardly anyone acknowledges is this: Every flaw in Wikipedia — and the above mentions of edit wars, spottiness of coverage, the threshold of ‘notability,’ they are all accurate in my observation — every flaw in Wikipedia *also exists in all other encyclopedias*. / One needs only to read the many books about Mortimer Adler at the Encyclopedia Britannica — and the accounts of the many fights among the staff prompted in the tellings of his story — to realize this is true. / This, I suspect, is the *real* ‘threat’ seen by traditionalists about Wikipedia. Rather than a quasi-anonymous ‘authority’ where all the fights, squabbling, and oversights take place in genteel privacy, at Wikipedia they take place in the raucous open. / *How* do you know what you think you know? Who *is* an authority? How much consensus is there on *any* topic? These are the questions Wikipedia evokes about *all* sources, and it’s clear the discomfort some have isn’t about Wikipedia, but the implicit critique of all knowledge when they want such things to be unquestionably ‘authoritative.’ Comment made on the “Freakonomics” blog (Mengisen, Annika. “By a Bunch of Nobodies: A Q&A With the Author of The Wikipedia Revolution” Freakonomics: the Hidden Side of Everything. New York Times Company, 16 Jun. 2009. Web. 30 Nov 2009. (direct link: : http://freakonomics.blogs.nytimes.com/2009/06/16/by-a-bunch-of-nobodies-a-qa-with-the-author-of-the-wikipedia-revolution/?pagemode=print)

102 “I’m not alone in having read peer-reviewed studies that used what I found to be questionable measures to establish certain traits: self-report questionnaires to judge the quality of parenting by lesbian couples, violent fantasies as indicators of increased aggression in children who have watched a lot of violent films. In many cases, the sample size is fatally small. Whatever the standards for admissible data that have been developed by various disciplines’ national boards, these processes aren’t perfect, and not all readers will be persuaded by all the data and how it is used.” Maehe, Jeff "What It Means to Ban Wikipedia." College Teaching 57.4 (2009): 229-236. EBSCO MegaFILE. EBSCO. Web. 12 Nov. 2009.

103 I think this comment from Pat Cumming at the ACRLog (“Explaining authority” ACRLog. ACRLog. 13 May 2009. Web. 8 Dec 2009 [direct link: http://acrlorg.org/2009/05/13/explaining-authority/]), starts to scratch the surface of what I’m getting at here: “I’ve recently tried something in classes that seems to work
I use the term credibility instead of authority and then I ask them why they believe what I say, how do they
know whether or not to believe a friend and what would make them believe something said by a stranger.
They usually say that it’s because I’m paid by the college which leads us to a discussion of qualifications
and then we move on to trust and verification and how information is presented, etc. I then go on to
evaluate printed information and web sources according to the criteria they come up with. It’s really
interesting to see their reaction and depending on the group, the discussion can be pretty lively.” Also, a
consultant has written a piece about the “enemies of learning” that I think rings true and also closely
relates. He says the enemies are: our inability to admit that we don’t know, the desire for clarity all of the
time, the inability to unlearn, confusing learning with acquiring information, not giving permission to
others to teach us, and a lack of trust.
http://wayspace.wayzata.k12.mn.us/blogs/digitaleyes/2009/09/15/enemies-of-learning/ I find this list to be
quite insightful, even if it does come from a source that Wikipedia would not recognize as authoritative. : )

104 We might be really good at logic and reasoning, think of all kinds of critical questions to challenge
others with, be able to see connections others can’t, and even be aware that we have all kinds of unexplored
assumptions, premises and presuppositions. Still, the fact that trusting others is part and parcel of all of this
can’t be excluded.

algorithmic-authority). 9 Dec 2009. Clay Shirky says: “the criticism that Wikipedia, say, is not an
‘authoritative source’ is an attempt to end the debate by hiding the fact that authority is a social agreement,
not a culturally independent fact. Authority is as a authority does.” Although I am not sure I would totally
agree with Shirky, I think there is something to this comment. One of the problems with this otherwise fine
from Gregory McNamee at Encyclopedia Britannica is that it seems to downplay [albeit humorously, with
tongue in cheek] the personal and social element of knowledge – and the necessary correlate of trust (i.e.
“If your mother says she loves you, get it verified from two independent sources.) – that Shirky discusses
here.

106 How can we help this happen? Note that: Some trust others easily, and some don’t. (why this is the
case is surely in part unknown, and in part known. Poverty expert Ruby K. Payne discusses how one's
family structure affects one's views of cooperation, competition, authority, male identity and deception.
one is disposed to trust others, some persons are considered more trustworthy than others because their
perceived character (but, on the other hand, note that sometimes we might trust someone we might not
otherwise trust if we are confident they have no reason to not tell the truth, or if the consequences of
accepting/rejecting what they say are not so great). Of course sometimes we trust people for their judgment
in some areas, but not necessarily in others (so know where you are expert and where not – know your
role!)

107 What about knowledge in the arts? Bach comes to mind. He really did not become the giant he is today-
-the literal foundation of all western music--until he was championed 100 years after his death (1750) by
Felix Mendelssohn who oversaw a now famous performance of the St. Matthew Passion. Before that
event, Bach had been largely forgotten. Some other “major shifts in established knowledge that come to
mind are that “modernization” does not necessarily mean “secularization”, that “race” is not a meaningful
biological term (“One result of debates over the meaning and validity of the concept of race is that the
current literature across different disciplines regarding human variation lacks consensus
<http://en.wikipedia.org/wiki/Scientific_consensus>, though within some fields, such as biology, there is
strong consensus.” [Wikipedia]), or the growing realization that how we use language shapes our world (http://www.edge.org/3rd_culture/boroditsky09/boroditsky09_index.html ). The author comments that
consensus in her field is that “people who speak different languages do indeed think differently and that
even flukes of grammar can profoundly affect how we see the world.”
And when one considers that Pluto is no longer a planet, or that Columbus did not “discover” America, or that the “fact-checking” many reporters do is pretty loose (perhaps esp. business reporters?: [“For instance, Dun and Bradstreet gets the information for its small-business information reports in part by asking those very same small businesses to fill out questionnaires about themselves” -- Garfinkel, Simon L. "Wikipedia and the Meaning of Truth." Technology Review 111.6 (2008): 84-86. EBSCO MegaFILE. EBSCO. Web. 2 Nov. 2009]), such questions are hardly surprising. This becomes even more difficult when the companies that deal with these reputable sources begin to behave badly -- “see recent Elsevier story & the story about cancer research [link does not work, but this source covers the same issue: Vastag, Brian "Cancer Fraud Case Stuns Research Community, Prompts Reflection on Peer Review Process." JNCI: Journal of the National Cancer Institute 98.6 (2006): 374-376. EBSCO MegaFILE. EBSCO. Web. 13 Nov. 2009."].”

http://en.wikipedia.org/wiki/Wikipedia:No_original_research, and http://en.wikipedia.org/wiki/Wikipedia:NPOV, accessed Oct. 29, 2009. It goes without saying that people working in this or that field are actively debating many things - hopefully, learning from their disagreements, and being open to having views changed by good evidence and argument…. (of course in accordance with the generally accepted methodologies and standards of proof in those fields).

It is analogous to the difficult decisions that “objective” newspapers must make about which stories to cover, what to feature on the front page, and what sources they quote…

“The goal is to reflect established views of sources as far as we can determine them.”

“…viewpoints held by limited minorities do not belong in Wikipedia even if they are true and whether or not you can prove it http://en.wikipedia.org/wiki/Wikipedia:Reliable_sources, Accessed Oct. 30, 2009, and http://en.wikipedia.org/wiki/NPOV, accessed Oct. 30, 2009). I have a scholarly friend whose view is that “established knowledge remains established either because it is trivial or because no one has questioned the facts. Matters that are hotly debated are in Wikipedia one day and out the next, alternating incessantly.” I’d want to talk more about that, but his point is well taken, I think! Also, just for fun: http://neuroanthropology.net/2008/06/03/the-allegory-of-the-trolley-problem-paradox/

Some might wonder why mainstream publications are better than compelling-produced online movies like Zeitgeist, or Loose Change for example. And why should the claims in Dan Brown’s “Da Vinci Code” (i.e. “facts accurate, story fiction”) not be taken seriously? The 9-11 truth movement, Holocaust denial, Zionist plots, etc? Again, while I certainly agree that there are massive problems with these and other “conspiracy theory” works, I think we need to give serious thought about how to answer questions like these, not just saying “these sources are good but these sources are bad”, a message that many students are unlikely to accept (“Explaining authority” ACRLog. ACRLog. 13 May 2009. Web. 8 Dec 2009 [direct link: http://acrlog.org/2009/05/13/explaining-authority/])


The first thing I recommend is starting a user account and messing around on your personal page. You can also play in the sandbox: http://en.wikipedia.org/wiki/%E6%B2%92%E7%9B%92. Here are a few

118 An academic friend of mine writes says about this process: “Research only begins when you put common knowledge into question. If after you do your research you end up agreeing with the encyclopedia then you probably picked a trivial question.”


120 Keep in mind that “if no reliable third-party sources can be found on an article topic, Wikipedia should not have an article about it.” [http://en.wikipedia.org/wiki/Wikipedia:No_original_research](http://en.wikipedia.org/wiki/Wikipedia:No_original_research), accessed Oct. 29, 2009. They advise finding examples of contributions that have been accepted, for example, entries on the contents of a novel, etc., and also recommend being ready to argue why a particular topic is notable enough for inclusion. Finally, cite the info in the article.


126 Of course, someone must have the final say. This is why there are arbitration committees, and if all else fails, Jimmy Wales.

127 I culled these questions from the Christian apologist Greg Koukl. It seems to me that these excellent questions can be used by anyone to help encourage fruitful conversations, i.e. good Socratic dialogues…

128 "Do not combine material from multiple sources to reach or imply a conclusion not explicitly stated by any of the sources. Editors should not make the mistake of thinking that if A is published by a reliable source, and B is published by a reliable source, then A and B can be joined together in an article to reach conclusion C. This would be a *synthesis* of published material that advances a new position, and that constitutes *original research*. "A and B, therefore C" is acceptable *only if* a reliable source has published the same argument in relation to the topic of the article…Research that consists of collecting and organizing material from existing sources within the provisions of this and other content policies is encouraged: this is "source-based research", and it is fundamental to writing an encyclopedia. Take care, however, not to go beyond what is expressed in the sources or to use them in ways inconsistent with the intent of the source, such as using material out of context. In short, **stick to the sources**….Even with well-sourced material,
However, if you use it out of context or to advance a position that is not directly and explicitly supported by the source used, you as an editor are engaging in original research. Carefully summarizing or rephrasing source material without changing its meaning is not synthesis—it is good editing. Best practice is to write Wikipedia articles by researching the most reliable published sources on the topic and summarizing their claims in your own words, with each claim attributable to a source that explicitly makes that claim. 


They might also find out, for example, that they don’t really understand the conventions of the discipline that may cover a particular topic. Historical scholarship in particular requires a command of the scholarly literature, and its standards of what constitutes good method and evidence will differ substantially from the hard sciences, for example. Larry Sanger, Wikipedia co-founder, states this well when he says: “despite a sort of anti-expert bias on Wikipedia, it remains the case that a person who appears to write authoritatively, who has the facts at his command as an expert typically does, and who can marshal them effectively in a dispute, has a decided advantage on Wikipedia. This, I think, has been a necessary condition of Wikipedia’s improving at least as well as it has. By reputation anyway, Wikipedia’s articles in fields such as mathematics, engineering, computer science, and the hard sciences are rather better developed and of higher quality than its articles in the social sciences, humanities, and the arts – consistent with the finding of the aforementioned, flawed Nature report, which was limited to scientific topics. This, I think, is because the fields themselves are somewhat more amenable to straightforward negotiation, because expertise and sound methodology in these fields are easier for the average contributor to recognize and respect. In physics, for example, there is simply less to debate about than in, say, philosophy.”

http://www.larrysanger.org/FateOfExpertiseAfterWikipedia.pdf. Social studies scholar Andrew Abbot points out that it is more critical for some disciplines than others to make use of the resources that libraries typically contain and organize, stating that: “…in library-based work [historians, English literature, etc], there is a taste for reinterpretation that is clever and insightful but at the same time founded in evidence and argument” He also states about this kind of work that: “Meaning has an extraordinary multiplicity that cannot be easily captured by the rigidly limited vocabularies of variables and standard methods” and that there are disciplines not merely aiming for ‘more rapid convergence’, but divergence, i.e. comprehensiveness and richness’ (Quotes from Andrew Abbot, “The Traditional Future: A Computational Theory of Library Research” [pre-print]). Librarian Rold Norgaard agrees, and when speaking of “information literacy” he says: “…information literacy’s connection to community – that is, the ongoing social and disciplinary practices on which any information literacy must depend and in which it must take root. The arts of information literacy vary according to the discipline and the ways that a particular discipline makes and communicates knowledge. Our instruction should likewise always reinvent itself to acknowledge those nuances.” (Norgaard, Rold, “Writing Information Literacy in the Classroom: Pedagogical Enactments and Implications”, Reference & User Services Quarterly, vol. 43, no. 3, Spring 2004). In sum, it is true that “rules of thumb” for evaluating content will serve students well when it comes to any discipline, and yet… Interestingly, different groups represent specific views about how evidence-based study is best done within their disciplines. Before one is labeled a “heretic”, one previously learns the basics of existing and participating effectively in that community.

The AASL Guidelines, section 3.3.6 aim to help students “Use information and knowledge in the service of democratic values.” It seems to me that one of the great things about American democracy is that people have “the right to be wrong”. American democracy is unique in that it balances strong convictions (faith/conscience) and strong civility (political). I personally tend to think we all tend to be a bit ideological about this or that, but that the main question is what kind of ideologue we are…Can we fundamentally disagree with someone and still consider them a person of equal, intrinsic value – regardless of how others might evaluate them – with whom we are determined to share a common society / life?

“The steps of the Wikipedia assignment were relatively simple: target a problematic entry, undertake research in scholarly articles and book-length treatments, determine points of scholarly conflict and consensus, write a NPOV treatment reflecting the arguments and citing their proponents, include references and perhaps even a snippet from a related primary source and/or an image, if possible, and provide internal


133 She sums the learning outcomes for the project well here: “…researching and writing about a specific historical topic, recognizing the relative value of various resources for research (including Wikipedia), contributing to high-stakes historical discourse, getting a real sense of what historiography is and participating in its construction, and sharing the process of that discourse with peers. This assignment replaced a previous assignment in which the students shared PowerPoint presentations with the class about their ongoing research for their final historiography papers on a particular subset of witchcraft-related scholarship.” Pollard, Elizabeth Ann "Raising the Stakes: Writing about Witchcraft on Wikipedia." History Teacher 42.1 (2008): 9-24. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2009.

134 Crovitz, D., and W. Smoot. "Wikipedia: Friend, Not Foe. " English Journal 98.3 (2009): 91-97. ProQuest Education Journals, ProQuest. Web. 12 Nov. 2009. Re: Encyclopedia writing: Articles should be primary from reliable secondary sources (tertiary sources are: compendia, encyclopedias, textbooks). Primary sources are hard to use in the right way (one may actually be doing original research, based on the way one cites these....) http://en.wikipedia.org/wiki/Wikipedia:Reliable_sources “Encyclopedia writing is pretty well understood -- using the inverted pyramid, where the first three sentences give a complete summary of what you're about to read and as you go down the article gives you an elaboration of the basic information. It's very structured data.”

http://mobile.salon.com/books/int/2009/03/24/wikipedia/index1.html

135 He goes on to say: “The larger rhetorical issues of using facts to support arguments are much more crucial to students in their present and future lives as thinkers—they have much wider applicability and demand so much more attention—than mechanical issues of double-checking facts, scanning author’s biographies, seeking external cues of “bias” etc. The most verifiable fact loses all effectiveness the instant it is used to prove more than it can prove or used in a way that makes an audience feel manipulated or deceived.” Maehre, Jeff "What It Means to Ban Wikipedia." College Teaching 57.4 (2009): 229-236. EBSCO MegaFILE. EBSCO. Web. 12 Nov. 200

136 For example, here’s a topic recommended for a history class in a recent teaching periodical: what was really the most important cause of World War I and how could it have been avoided? (don’t summarize, analyze, the author says). “Was the murder of the archduke really as important a cause of World War I as many people believe? [Here’s an outline:] I. Introduction — Brief explanation of pre-WWI events, II. The argument that the murder of the archduke was the main cause, III. Evaluation of that argument, IV Conclusion. Badke, William "Stepping Beyond WIKIPEDIA." Educational Leadership 66.6 (2009): 54-58. EBSCO MegaFILE. EBSCO. Web. 3 Nov. 200.