When the facts no longer speak for themselves: Pedagogy for the post-truth era

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Abstract:

The "post-truth era" is marked by a shift toward a period in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief. Teaching within this era requires an emphasis in storied pedagogy, moving away from transmission of knowledge toward the crafting of powerful narratives built upon evidence that are connected to the lives of modern learners. This article seeks to illustrate the power of story within the post-truth era, critique the over reliance of the academy on enlightenment ways of thinking, and equip teachers with a 21st century critical pedagogy meant to effectively counter anti-factual understandings held by students.

Key Words:

21st century learner, critical pedagogy, culture, narrative, post-truth era, social media.

Introduction

In June 2017, the New York Times ran an article, "Climate Science Meets a Stubborn Obstacle: Students" telling a powerful story of science teacher James Sutter and his struggles to teach his students about human influences on climate change in the face of his students' claims that science is wrong (Harmon, 2017). While the article goes on to describe a disbelief in science that is reflective of cultural position taking in his local community in Ohio, articles such as these highlight a very real problem in classrooms across the United States: facts no longer speak for themselves.

Many describe this recently more obvious trend, that is a shift away from a belief in facts, as the "post-truth" era (Peters, 2017). As Mr. Sutter, and countless other teachers know, teaching students who hold positions that run counter to clear factual evidence is

remarkably frustrating. Knowledge transmission pedagogies reflective of enlightenment ways of knowing make up a large part of the training teachers in today's classrooms have received. These practices were built on notions that students would take in knowledge presented by the teacher as facts, allowing students to expand their overall understanding of the functions of their world. However, fact focused approaches to teaching do not include ways to address students of the post-truth era, who may believe the opposite of facts, and whose beliefs often move toward fanaticism when those facts are attributed to ways of knowing common to scientifically arrived at understanding.

Teachers need both a better understanding of how modern students arrive at contravening conclusions and they need to examine the ways and power of narrative to shape current thinking if teachers are to enact a responsive 21st century pedagogy that empowers their students within post-truth contexts. This article seeks to provide such an explanation in order that practicing educators may become more aware of their own traditions and assumptions, gain a broader understanding of the ways in which social/mass media now mediate thought, and learn to leverage the tools of story and critique to bolster factual understandings to craft powerful and transformative classroom practices.

What is the "Post-Truth" Era?

Following the 2016 presidential election cycle, many began to talk about the "post-truth era" as if a new age had begun. Indeed, the term "post-truth" earned Oxford Dictionary's word of the year designation in 2016, where they define post-truth as an adjective, "relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief" (Oxford-Dictionary, 2016). However, while the election cycle of 2016 marks a point of more widespread acknowledgement of a change in the way people come to understand their world, the post-truth phenomena has been present for much longer (Keyes, 2004).

The post-truth phenomenon originates in the widespread growth of mass media, social media and the elevation of cultural ways of knowing to a level equal to scientific ways of knowing (Gabriel, 2004). Culture itself has become a profitable object of industry (Giroux, 2001), with modern social media platforms like Facebook, Twitter and YouTube fully monetizing the spread of culture to make billions in profits. Speaking about the culture industry, Horkheimer and Adorno (2002, p. 107) remarked that "it's victory is twofold: what is destroyed as truth outside its sphere can be reproduced indefinitely within it as lies." For many parents and students, a vast majority of their experience and knowledge is filtered through and defined by these select few social media platforms.

Within the classroom, the oldest common example of post-truth relates to the teaching of evolution. Though the scientific evidence is clear, nearly 40% of people in the United States still favor a belief in a creationist or intelligent design perspective (Pew, 2014), which is a cultural belief born of religion, not a fact-based, scientific theory that has been widely and rigorously tested. While this particular post-truth instance has been a part of US classrooms for many decades, we now see the addition of new, counter scientific arguments filtering into classrooms. Is climate change accelerated by human activity? Yes. Do vaccines cause autism? No. Is the Earth flat? No. These

questions have all been answered through rigorous scientific study, however support for such anti-scientific thinking continues to grow. This leaves teachers in a peculiar position. When a teacher cannot turn to facts as evidence of a claim they make in the classroom, where can they turn?

While the notion of education for a "post-truth era" may seem very specific to our current political climate, the call to address these concerns has been echoed by many researchers (Journell, 2017; Peters, 2017). Michael Peters (2003) appears to forewarn of the increasing role attention to facts and truth will play in the classroom in his early discussion of the ways in which a turn toward the teaching of basic skills for a knowledge economy moves teachers away from critical reflection on how knowledge is generated. More recent research found that high school students now appear to favor anecdotal evidence and personal beliefs over evidence-based arguments when they engage in debate over controversial issues (Crocco, Halvorsen, Jacobsen, & Segall, 2017). Kahne and Boyer (2017) similarly found that alignment with one's worldview is more influential in the thinking of school age children than an evaluation of the accuracy of the positions they encounter. Michael Peters (2017, p. 565) comments recently that, "…the notion of 'facts' and 'evidence' in a post-truth era effects not only politics and science but becomes a burning issue for education at all levels."

Facts vs. Story

For teachers, presenting students with facts is a common practice. Indeed, the remembering of facts or "knowledge," as the lowest tier of Bloom's (1956) original taxonomy, functions as a foundation for all other types of learning that he believed occurred in classrooms. Scientific knowledge and facts produced through rigorous research were given prominence above others ways of knowing, in western culture, from the enlightenment through to the explosion of mass media (Giroux, 2001; Horkheimer & Adorno, 2002). However, as knowledge production broadens beyond scientific dissemination to include widespread cultural production, spread via mass media and social media, one's construction of knowledge and beliefs becomes a distinctly social process (McLaren & Kincheloe, 2007). While facts make up the foundation of scientific ways of knowing, it is opinion that is foundational to social ways of knowing, and loyalty to opinions shared by a group is a key marker of group membership.

Facts are open to scientific processes of contestation, but opinion is different. As Adorno (2005) explains, "personal opinion becomes, as one's possession, an integral component of one's person, and anything that weakens that opinion is registered by one's unconscious and preconscious as though it were a personal injury" (p. 107). While facts are derived from scientific study, opinions are derived from the narratives people tell. Facts rely on evidence, however, opinion is only dependent on logical consistency to find merit (Adorno, 2005). Stories relate to facts, but also select for and attach meaning to certain facts while ignoring others completely (Gabriel, 2004).

One clear marker for the beginning of the post-truth era is the mass spread of social media. When the social sphere becomes more accessible than the scientific sphere, as is the case currently, opinion often eclipses knowledge as the accepted currency of thinking (Gabriel, 2004). It is the interpretive power of narrative, its capacity to explain

and evaluate phenomenon, and connect these explanations to emotions and common experiences that lends authority to social ways of knowing (Gabriel, 2004; Stewart, 2012). In this way, interpretation becomes more important than facts, and what cannot be explained through facts, can be with stories (Stewart, 2012). As Stewart (2012) explains, "…narratives are critical in conferring or withdrawing legitimacy, opening up or closing down options, or garnering or eliminating public support for a particular policy" (p. 594).

As an example of the disconnect in Mr. Sutter's classroom, though the scientific conclusion that humans have accelerated and intensified climate change is clear, it is his failure to account for and engage with the narratives that are socially popular in the community in which he teaches that cause his students to argue for positions that run counter to the facts he presents. Indeed, pushing back against unscientific beliefs in the classroom, without attending to the narratives that these beliefs are built upon, often has a reverse effect. The teacher "…cannot push anyone to develop, or 'get them to see' or 'impact' them" (Perry, 1988, p. 160). By pointing out factual inconsistencies, students are forced to either abandon positions held by the groups to which they belong, or move their understandings to positions of faith, which rely purely on opinion for authority in the absence of, or counter to, evidence (Adorno, 2005). Because the post-truth era is one in which the story has become more powerful than the facts, teachers may increase their effectiveness by engaging in pedagogies that run counter to the knowledge transmission pedagogies that dominated much of their training.

Teaching in the Enlightenment Tradition

Within formal academia one of the most commonly heard phrases in classrooms is that "the facts speak for themselves." As modern institutions of learning, those who work within K-12 and higher education primarily favor a enlightenment tradition of thinking over social reasoning (Horkheimer & Adorno, 2002). As a consequence, "too many intellectuals and educators are disconnected from social movements and have trouble connecting their work both to pressing public issues and wider constituencies outside of [academia]" (Giroux, 2001, p. xxix). As this process has become ingrained into the education ethos, meaning has been replaced by the quest for formulas, rules and probabilities (Horkheimer & Adorno, 2002). Large numbers, rather than the particular cases, have become a primary currency of thought in academic institutions (Horkheimer & Adorno, 2002). Though this criticism of academics has been leveled before, the dominance of knowledge transmission pedagogies remains common throughout the locations in which teachers are trained. For teachers, their positioning within formal academia is clear, both as highly educated graduates of higher education institutions and as the primary workers of K-12 educational settings. Their full immersion into a culture of enlightenment thinking is why, for teachers, the facts do speak for themselves. But for those not fully ensconced in the academy, such as students, the story often speaks much louder.

As a group, teachers typically have a background that disadvantages them both from connecting in a convincing way with many of their students and from understanding why this connection fails. Teachers typically hail from white, middle class backgrounds though their students come from increasingly more diverse backgrounds (Amatea, Cholewa, & Mixon, 2012). Additionally, teachers tend to graduate from

schools of education that follow, revere, and pass on an enlightenment focus on objective data, factual understandings of subject matter and basic skills (Adorno, 2005; Giroux, 2001). This focus ignores social realities and positions knowledge as external to social, political and economic influences (Giroux, 2001). As Horkheimer (2004) explains, "the crime of modern intellectuals against society lies not so much in their aloofness but in their sacrifice of contradictions and complexities of thought to the exigencies of so-called common sense" (p. 58). By leaving out these elements, teachers engage in a hidden curriculum that silences discussion about the relationship between class and culture (Giroux, 2001). However, these relationships are on full display and are fully immersive for a diverse body of students that explain their world through storied ways of knowing.

This is not to say that all modern teaching is fact-based, knowledge transmission pedagogy – the type of "banking" education critiqued by Freire (1970) or the "undemocratic" teaching argued against by Dewey (1938). Today's classrooms also include many forms of experiential and reality-based learning approaches have been successfully employed, from inductive teaching to problem-based learning. However, hailing from an academic tradition that places primacy on enlightenment ways of knowing, even the most progressive of pedagogues can find themselves frustrated when basic facts they present do not speak for themselves.

Teaching in the Post-Truth Era

Through a better understanding of the post-truth era, the ways in which story is often more powerful than facts, and academic traditions that favor knowledge-based transmission, it is now possible to turn offer ways in which to empower teachers to teach convincingly in the post-truth era. Teachers should avoid teaching the facts as standalone concepts and move toward an approach in which the facts are positioned with their consequences (Journell, 2017). Educators wishing to foster intellectual development, justice, and academic ways of knowing cannot do so outside of the political, economic, and cultural struggles that converge in the classroom (Giroux, 2001; McLaren & Kincheloe, 2007). Teachers can also connect school knowledge and practices with social interests, political power and economic power (Giroux, 2001) and be attendant to how these intersect in their local classroom and community.

Additionally, to be persuasive about the facts that they teach, teachers need to equip their students with a capacity to be skeptical – to reason through questions they have and come to understandings in meaningful ways. Though students can certainly have their own opinions, they cannot have their own "alternate facts" and it must be a requirement in classrooms that opinions be backed by evidence upon which all can reasonably agree (Loewen, 2009). The widespread availability of culture does not educate others, it contributes to the decay of education and the progress of incoherent and unsubstantiated thought (Horkheimer & Adorno, 2002). To be effective, rather than attempting to counter absurd stories with facts, teachers need to address storied thinking head on and co-opt the power of storytelling for the betterment of their students.

As McLaren & Kincheloe (2007) remind us, "… in knowledge work there is only interpretation, no matter how vociferously many analysts may argue that the facts speak

for themselves" (p. 24). To effectively argue against anti-factual thinking, teachers should harness the power of the story, coupled it with the facts, and teach their students how to effectively interpret their world. Teachers need to be storytellers, approaching topics in a mature manner and working with the listener/students to create understanding about deeper truths (Gabriel, 2004; Lapp & Carr, 2007). Such an approach to teaching through storytelling has been successfully deployed in everything from the humanities (Huber, Caine, Huber, & Steeves, 2013; Journell, 2017) to the hard sciences (Hadzigeorgiou, 2006). In the post-truth era, teachers can double down on this effective pedagogy, allowing them to not only position facts within stories, but to engage in "a culturally inclusive approach to teaching and learning that enhance student understanding of themselves, others and cultural perspectives" (Baskerville, 2011, p. 109).

Though teachers are making use of story to meet students on their level, teachers must also equip their students to be aware of the motives, fantasies and desires of those who tell stories (Gabriel, 2004). This awareness allows students to enter into "multi-perspectival thinking" (Hobbs, 2017, p. 29) in which they begin to understand not only how others interpret stories and facts, but also how one's own views can shape their personal perceptions. By connecting stories to evidentiary understandings and equipping students to become critical consumers of all information they encounter (Journell, 2017), teachers harness post-truth ways of knowing, couple them with academic approaches to knowledge, and thus prepare students to reason effectively when presented with information in the types of media that dominate 21st century social spheres.

For Mr. Sutter, teaching about climate change should not be solely composed of a presentation of facts about receding glaciers, rising water levels, or more dynamic shifts in weather patterns. In the post-truth era, teaching about climate change should be composed of the previous evidence woven into real and obvious impacts on our planet and our people. The evidence should be connected to stories of natural disaster, loss of critical land and animal resources, and to the visible effects of industrialization on the local environment of their community, so that elements of what is learned can be immediately familiar and recognizable for students (Perry, 1988).

Given a storied way of engaging with classroom content, students must then be thrust into critical dialogue with one another. Critical dialogue is a problem-posing discussion setup for equitable participation by all members, built to engage with multiple viewpoints, and designed to make students aware of the hidden ways in which power operates behind common discourses (Freire, 1970; Hilton, 2013; Kincheloe, 2007). These dialogues must challenge students (1) to identify the stories they hear, (2) to determine what elements match or run counter to evidence they can experience, (3) to examine and critique assumptions and rhetoric built into convincing arguments, (4) to arrive at a position that incorporates new understanding, and finally (5) to provide meaningful engagement with the thoughts and meaning making of other students.

As a consequence of engaging the pedagogical approach described above, the primary goal of the teacher moves from teaching about a subject to teaching students how to reason by providing them with spaces, content, and other reasoning learners with which to practice and improve their own reasoning. Equipping students to reason is

not simply a path toward academic success, it is the means by which they can understand and determine their own ends (Horkheimer, 2004). By teaching students to become critical consumers of stories, and by positioning factual understandings within powerful stories, together teachers and students can learn to reason effectively and overcome the intellectual pitfalls waiting within the post-truth era.

Conclusion

With the growth of mass and social media, a cultural emphasis on storied ways of understanding has quickly displaced a reliance on scientific ways of knowing. In the post-truth era, even some of the most basic knowledge about our planet, such as that it is a sphere rather than a flat plane, appears to be open to contestation. Though it may be easy to dismiss one who professes such a position as unintelligent, such understandings represent a societal problem with substantial consequences in everything from modern elections to future cultural norms. As those whose responsibility it is to educate each generation, it is largely the task of teachers to address misunderstandings, both large and small, in our world. However, teachers will be unable to meaningfully address modern post-truth understandings if they engage in 19th century teaching techniques, based on 16th century enlightenment ways of knowing, which place a complete confidence in the power facts to win over the minds of 21st century learners.

Understanding the power of story to shape thought in ways often more convincing than facts, teaching must continue to move toward a 21st century pedagogy in which facts are bolstered by rich and powerful stories. The stories told in classrooms must be relevant to students in the local setting, connected to that which is clearly visible, and supplemented by facts. Additionally, 21st century students must be taught to be skeptical, to question, and to confirm or refute the stories they encounter. They must be given spaces in which to practice and groups of other learners with which to critically dialogue. Not only will such processes allow students to independently arrive at reasoned conclusions that confirm scientifically derived knowledge presented in the classroom, but these practices also prepare students to become critical consumers of information presented within the myriad forms of mass and social media that consistently mediate their lives. Within the stories encountered today lies the capacity to give and take away power. Equipping students to recognize, function, and succeed within a storied, post-truth era is the key to an empowering education. Teachers must rise to this new challenge.

References

Adorno, T. (2005). *Critical models: Interventions and catchwords.* New York: Columbia University Press.

Amatea, E. S., Cholewa, B., & Mixon, K. A. (2012). Influencing pre-service teachers' attitudes about working with low-income and/or ethnic minority families. *Urban Education, 47*(4), 801-834.

Baskerville, D. (2011). Developing cohesion and building positive relationships through storytelling in a culturally diverse New Zealand classroom. *Teaching and Teacher Education, 27*(1), 107-115.

Bloom, B. S. (Ed.) (1956). *Taxonomy of educational objectives, handbook 1: The cognitive domain*. New York: David McKay Co Inc.

Crocco, M., Halvorsen, A., Jacobsen, R., & Segall, A. (2017). Teaching with evidence. *Phi Delta Kappan, 98*(7), 67-71.

Dewey, J. (1938). *Experience and education*. New York: Simon & Schuster.

Freire, P. (1970). *Pedagogy of the oppressed* (M. B. Ramos, Trans.). New York: Continuum International Publishing Group Inc.

Gabriel, Y. (2004). The narrative veil: Truths and untruths in storytelling. In Y. Gabriel (Ed.), *Myths, Stories and Organizations: Premodern narratives for our times* (pp. 17-31). Oxford: Oxford University Press.

Giroux, H. A. (2001). *Theory and resistance in education: Towards a pedagogy for the opposition* (Revised and Expanded ed.). Westport, CT: Bergin & Garvey.

Hadzigeorgiou, Y. (2006). Humanizing the teaching of physics through storytelling: The case of current electricity. *Physics Education, 41*(1), 42-46.

Harmon, A. (2017). Climate science meets a stubborn obstacle: Students. Retrieved from https://www.nytimes.com/2017/06/04/us/education-climate-change-science-class-students.html

Hilton, J. T. (2013). Digital critical dialogue: A process for implementing transformative discussion practices within online courses in higher education. *MERLOT Journal of Online Learning and Teaching, 9*(4), 602-614.

Hobbs, R. (2017). Teaching and learning in a post-truth world. *Educational Leadership, 75*(3), 26-31.

Horkheimer, M. (2004). *Eclipse of reason*. New York: Continuum.

Horkheimer, M., & Adorno, T. (2002). *Dialectic of enlightenment: Philosophical fragments* (E. Jephcott, Trans.). Stanford, CA: Stanford University Press.

Huber, J., Caine, V., Huber, M., & Steeves, P. (2013). Narrative inquiry as pedagogy in education: The extraordinary potential of living, telling, retelling, and reliving stories of experience. *Review of Research in Education, 37*, 212-242.

Journell, W. (2017). Fake news, alternative facts, and Trump: Teaching social studies in a post-truth era. *Social Studies Journal, 37*(1), 8-21.

Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American Educational Research Journal, 54*(1), 3-34.

Keyes, R. (2004). *The post-truth era: Dishonesty and deception in contemporary life*. New York: St. Martin's Press.

Kincheloe, J. L. (2007). Critical pedagogy in the twenty-first century: Evolution for survival. In P. McLaren & J. L. Kincheloe (Eds.), *Critical pedagogy: Where are we now?* (pp. 9-42). New York: Peter Lang.

Lapp, C., & Carr, A. (2007). *The dialectics of storytelling and storyselling: Sometimes the facts get in the way of the story*. Paper presented at the 5th International Critical Management Studies Conference, Manchester University, UK.

Loewen, J. W. (2009). *Teaching what really happened: How to avoid the tyranny of textbooks & get students excited about doing history*. New York: Teachers College Press.

McLaren, P., & Kincheloe, J. L. (Eds.). (2007). *Critical pedagogy: Where are we now?* New York: Peter Lang.

Oxford-Dictionary. (2016). *Word of the year 2016 is...* Retrieved from https://en.oxforddictionaries.com/word-of-the-year/word-of-the-year-2016

Perry, W. A. (1988). Different worlds in the same classroom: Students' evolution in their vision of knowledge and the expectations of teachers. In P. Ramsden (Ed.), *Improving Learning: New Perspectives* (pp. 145-161). London: Kogan Page.

Peters, M. A. (2003). Truth-telling as an educational practice of the self: Foucault, *Parrhesia* and the ethics of subjectivity. *Oxford Review of Education, 29*(2), 207-223.

Peters, M. A. (2017). Education in a post-truth world. *Educational Philosophy and Theory, 49*(6), 563-566.

Pew. (2014). Overview: The conflict between religion and evolution. Retrieved from http://www.pewforum.org/2009/02/04/overview-the-conflict-between-religion-and-evolution/

Stewart, J. (2012). Fiction over facts: How competing narrative forms explain policy in a new immigration destination. *Sociological Forum, 27*(3), 591-616.