

Sources and citizens: An essay in applied epistemology

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Abstract

How should pupils use the internet to learn? This essay sets up two modes of using online sources, reading for information and reading for evidence, and evaluates their value for schools. The former is well known; pupils decide whether the source is telling the truth or not. The latter is more familiar in advanced historical investigation, namely deciding what this source's utterance means for the question in hand. One of these simply hands pupils information. The other requires them to understand what they are reading. It is argued that an education that only involves one of these cultivates passive pupils who are unable to adjust their own attention or listen to minority reports in science. Only when pupils also investigate primary sources will they experience developing their own knowledge, and believe in education.

Keywords

Source criticism in schools, dataphilosophy, applied epistemology

Introduction

In recent years a small cottage industry has emerged amongst educationalists, journalists and politicians eager to teach children how to read the internet critically. I am doubtless not the only one to have woken to the realisation that my 6-year-old is more familiar with Siri than I. Books, websites and TV programmes now present our children with paternal advice on how to recognise fake news, hackers and phishing attempts.

Critical reading has long been a theme amongst teachers. When I taught religion, English and history at a Norwegian high school I grew tired of pupils' exclusive use of standard and reliable news channels in their presentations, worrying that they were perhaps only really referring to the BBC to appeal to their teacher's patriotism. I reasoned that a future

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examiner would only witness their acute sense of source criticism if they showed their working, like good maths pupils. Perhaps they knew a few good sources, but were still unable to recognise the bad ones (Nygren and Guath, 2019: 32). I wanted to see the websites they had discarded along the way as well as the final product. So I sent them in search of lies.

In a religious studies class, pupils were to search the net for straw men telling lies about Islam and then refute them. The advantage of this approach was that you can't google lies, and they were given strict instructions not to find the refutation online. The lie was to be on the net, but the rebuff was to be their own. The results of the pedagogical experiment were instructive.

Once we had got over the delights of the *Uncyclopedia* and professional fact-checking websites such as *Politifact*, the average pupil chose an argument from authority, which is to say that they countered their straw man with one or two other sources. When pushed, they gave a reason for believing one rather than the other. A few had engaged in some form of fact-checking, but largely that was just a case of following the reasoning of their favoured sources. In short, it was one person's word against another's.

I have tried this experiment with many classes, reaping similar results each time. One group sticks out, however. I had generalised the task for some teacher training students, asking them to find lies in general that they could refute. This exceptional group refuted their truth-claim by drinking a can of Red Bull™, climbing onto a table and attempting to fly off it, thereby disproving the claim that Red Bull™ gives you wings.

On reflection, my religious studies pupils could have done something similar. A majority decided to refute the claim by an incautious right-wing politician that most terrorists are Muslim. My pupils could simply have found a list of all terrorist attacks in one area and one period and investigated the religious adherence of the perpetrators. That way, they wouldn't have to believe anyone's opinion on the matter; they would have proof. Instead of fact-checking direct truth claims, they would be checking their own procedure, and their own premises. Readers may carry out this exercise in their own time.

The Red Bull™ approach moves pupils from searching for information to searching for evidence. The internet is full of words, actions and materials that can count as evidence. Literature students find primary texts, religious studies students find religious expressions, social scientists find communities and historians find artefacts.

We know a good deal about pupil attitudes to information reliability in schools. Only in Scandinavia there has been a raft of empirical studies (notably Blikstad-Balas, 2016; Blikstad-Balas and Hvistendahl, 2013; Nygren and Guath, 2019) and handbooks (such as Kalsnes, 2019; Wikforss, 2017) concerning handling information. They all focus on the evaluation of online information rather than the interpretation of online expressions. In this article, I will therefore concentrate on describing the distinction as clearly as possible, and in the second half outline some consequences of neglecting the search for evidence in the classroom.

There is in fact more evidence than opinion on the internet, because the distinction depends on the eye of the beholder. Historians would liken the difference to that between primary and secondary sources. Typical secondary sources are history textbooks; typical primary sources are artefacts. The matter becomes more ambiguous, however, when we are studying knowledge-producing phenomena.

Consider the philosopher Martha Nussbaum. She has edited, translated and interpreted Roman Stoic philosophers as part of her academic career. She is also an extremely influential thinker in her own right, having won the Kyoto Prize in Arts and Philosophy in 2016 and the Berggren Prize for Philosophy and Culture in 2018. If my pupils were working on a

project concerning Roman Stoics, I would direct them towards an article by Nussbaum because it is reliable commentary on their topic (e.g. Nussbaum, 2010). She could inform them that Seneca didn't really believe in Emperor Claudius' divinity at all. If they were working on contemporary philosophers, however, I might direct them to exactly the same article as an example of Nussbaum's work. It would tell them that her reading of Seneca's writing on disgust speaks directly to contemporary debates.

In the Stoicism project, the article served as a secondary source. The knowledge it contained was identical to the project's topic. Pupils had to decide whether they believed it or not. In the contemporary project, the article served as a primary source, or evidence. It was the object of the pupil's knowledge, not identical to it. Pupils didn't have to believe or disbelieve the article's argument, they merely took it as evidence that Nussbaum is interested in Seneca, whether she was right about him or not. Even if they found an article where Nussbaum claimed that Seneca was a garrulous YouTuber from Kansas, it would count as evidence of her thought (although it would be worth checking whether that genuinely was an example of her mature and sober writings).

Everything on the internet can function as evidence (assuming a project describing websites) but not everything can function as opinion or secondary source (because not everything online is describing something else). So there is more evidence online than knowledge.

After the straw man debacle, I set a new task to my pupils, asking them to identify sources that answered a series of questions about what Christians believe. They had 10 questions (whether Christians believe in reincarnation, incarnation, sex outside marriage, the truth of the Koran, meditation, etc.) and very little time, so they were encouraged to find sources rather than answers, and to only begin the investigation, not find definitive solutions. I was interested in training them to search for evidence.

Perhaps predictably, I was presented with a barrage of secondary sources. I dismissed all biblical quotations as evidence of what Christians *should* believe rather than what they *do* believe. Similarly, the many contributions taken from the website of the Church of Norway were taken as evidence at best of the religious belief of one webmaster or author. There were a few Red Bull™ moments, though, when students read out extracts from blogs and discussion boards that they had discovered. Clearly some questions that were given seemingly knockdown arguments from religious texts felt problematic for real, screen-and-mouse Christians. The example may or may not be good practice, but it reveals a distinction between orthodoxy and lived religion that parallels reading for information or evidence.

The question of orthodoxy is not wrongly posed. It is extremely important that coherent and reasonable systems of belief be presented sympathetically in all their sophistication and historical context. Without such presentations, intercultural understanding would be impossible, communities orientalised and the wisdom of the ages rendered speechless. These are simply different academic tasks (Thomas and Rolin, 2019). Similarly, reading the internet for evidence is distinct from reading for information.

Both approaches are important. Our pupils need the opportunity to test the claims of their politicians, teachers and parents, whether they be online or in person, before they leave school. Citizens will hear a myriad of lies between graduation and grave. But they will also express opinions, so they need to learn to investigate actively as well as to evaluate (Nygren and Guath, 2019: 33). Social interaction and fact-finding jostle together on the same online platforms. Both are observable facts. In the following, I shall attempt to tease out some consequences of these different families of observation. The next section will make the distinction clearer: what kinds of source criticism do they entail? Which linguistic functions

do they study? What is their role in larger truth claims? Then we will deal with some of the problems of depending solely on one of these, arguing that exclusive use of secondary sources boils teaching down to finding authorities, renders pupils passive members of the knowledge economy and ignores minority reports. In the conclusion, I ask whether pupils ought to believe in their own education.

Thickening the description

Firstly, what does reading for evidence require of us, what does it look like, and what benefits does it give? A clear description of the distinction between evidence and information is necessary to then evaluate the two.

Identity, not reliability

The critical thinking skills required by reading for evidence and reading for information have different grammars. Good students of navigating digital information are adept at lateral reading: the habit of opening a parallel tab whilst reading one page in order to garner information about the source, funding, and possible bias of that website (Green and Nagle, 2019). Readers will then be able to discard that source as lacking in credibility, or adjust their reading to account for ideological leanings. Lateral reading is also important for reading for evidence, for different reasons.

When reading for evidence, author reliability is of negligible significance because we are interested not in the topic, but the author. If an author believes vaccinations cause autism, we have gained no medical knowledge, but are well placed to learn about misinformation and conspiracy theories. Lateral reading will give us more of that evidence, for example concerning who is funding, licensing or supporting that misinformation.

Reading for evidence is neither easy nor uncritical, but it does not require fact-checking a single document. It does, however, require careful identification. In our above example, we questioned whether an article claiming that Seneca is a Kansas YouTuber could be authored by Martha Nussbaum. Similarly, when reading websites pedalling views on autism: is this page parodying a conspiracy theory? Are the authors who they say they are? In an age of false avatars and deepfake videos, identifying an author can be as demanding as checking the reliability of their information.

Consider the teacher's dilemma: should I introduce my pupils to Donald Trump's twitter feed? The immediate reaction should perhaps be no. If we want pupils to gain reliable information about the situation of ethnic minorities in the USA, to learn and emulate balanced perspectives on democracy and international politics, then Donald Trump's twitter feed should be our last port of call. But notice here that we are assuming a desire for authority concerning issues he refers to rather than concerning the case of Mr Trump himself.

Are our pupils interested in the current direction of USA diplomatic policy? Are they investigating the attitudes of heads of state? If so, Donald Trump's twitter feed is a better source than such news channels that teachers otherwise consider reliable. Whatever textbooks might say, Trump's twitter feed is the place to learn about the president of the USA at the time of writing. The question is whether readers are interested in the source's author or its object.

Expression, not description

It is tempting to treat statements as knowledge about something. Even sentences that are obviously expressions, and so tell us most about the speaker, often look like descriptions of the world. If I tell you ‘This book I’m reading is exciting!’ you might well reply ‘Do you really think so?’ but it wouldn’t make as much sense to tell me ‘No, you are mistaken, all Lee Child novels are dull.’ Similarly many other statements such as ‘Tennis is my favourite sport’ and performatives such as ‘I bet it’ll rain tomorrow’ require engagement rather than fact-checking. They all, however, *look* like descriptions.

When discussing just this problem of our expression or description of individual sensations, such as ‘I’m hungry,’ Wittgenstein imagines his interlocutor offering justification of personal perspective:

Well, I *believe* that this is the sensation *S* again.

But of course, when we don’t have to fact check, justification is just as senseless as scepticism, so the reply is

Perhaps you *believe* that you believe it! (Wittgenstein, 2001: §260)

‘I believe’ is an expression just like when we express sensations like hunger. These expressions present themselves primarily as observables, not as second-hand descriptions, and we need to treat them as such.

Let us take as an example the performatives famously analysed in John Austin’s seminal work, *How to Do Things with Words* (Austin, 1975). What knowledge do we gain when someone says ‘I solemnly swear that I am up to no good’? We could, of course, observe their behaviour over the following hours, see if they sneak out of school, found a secret club or steal the janitor’s cat. That would count as checking whether their oath was in good faith or not. If we are unable to do so, however (say, we find ourselves unable to watch people hiding under invisibility cloaks), then all is not lost. We are still left with evidence that this person has taken an oath. Should we *believe* that they have taken the oath? We ourselves observed it, so we don’t have to take anything on trust.

What we take as online descriptions of the world can be hard to check, but as *expressions* of personal belief, we don’t even have to rely on the person’s honesty or self-insight. A promise is a promise, even a broken one.

Logical functions

Can reading for evidence compete with the quality and quantity of online information? The answer to one of my ‘what Christians believe’ questions was that 15% of Christians in the Church of Norway believe in reincarnation. No amount of bloghopping or observations can compare to that (Pål Botvar, quoted in Enger, 2013). We cannot expect pupils to submit their class project to peer-reviewed journals any more than their powerpoint presentations can serve as literature reviews in a doctoral thesis. If the results are so modest compared to the research available to them, why bother?

Observing online expressions enables pupils to observe and deal with complexity in real life. It only takes one observation to refute a generalisation. Take the truth-claim

‘Buddhists do not believe in a god’, which can be found in textbooks and websites alike. Many self-identify as atheist Buddhists. To claim they represent the entire religion globally is problematic. To claim they are the only kind of Buddhist is incorrect. How is a pupil to know that?

Naïve reading for information will search for authoritative statements that support their truth-claim; critical reading for information, for those that refute it. Diligent pupils will read several of both until they find one with a convincing argument. It is tempting to believe the information of any self-identifying Buddhist online. The entire process could be short-circuited by developing an argument based on online expressions. To do so, pupils need to find a text that is identifiably Buddhist and involves some form of belief in God. Even one of these will refute the truth-claim.

We could go further and require our students to find different arguments. A structured investigation might result in the discovery of artwork presenting a god, a philosophical discussion of the difference between the divine, human, and animal realms, rituals relating to divine figures, a myth involving Gods, and a contemporary opinion piece. Both strong and weak refutations are possible. Pupils learn to discover complexity directly this way rather than repeating demographic simplifications.

Differing grammars of source criticism imply that pupils learning to read for evidence need to be skilled in using logical functions such as ‘all’; ‘at least one’; and ‘only’, as well as subject-specific skills, in this case exemplified by the interpretation of religious artefacts online.

These examples and analyses enable us to summarise main characteristics of these two approaches to net-based sources, on the basis of which we can make an assessment of their utility for pedagogical purposes:

	Reading for evidence	Reading for information
Historiographic type	Primary	Secondary
Reader’s interest	Source’s author	Source’s object
Author’s function	Case/example	Authority/witness
How to check	Identification of author	Reliability of author
Linguistic function	Expression	Description
Pupil activity	Discovery	Repetition
Typical logical function	Refuting generalisations	Supporting an argument
Examples	Trump’s twitter feed	Encyclopaedia

Problems with secondary source criticism

Since becoming sensitive to this distinction a few years ago, I have been on the lookout for examples of it in schools and educational materials. Each time I found an intelligent teacher or librarian keen to the problems of source criticism and navigating digital information, I ask them where they would look for a diverse toolkit suited to pupil investigation. So I engage in a kind of Socratic reverse snowball research, holding firm to my belief that original thought is another word for insufficient reading: I looked for people likely to refute my claim that primary source criticism is absent from all education. I went to the best websites I could find, and the most informed teachers and librarians.

This is an essay rather than a presentation of data, so I won't defend any rigorous findings. Suffice it to say that I have yet to find a systematic presentation of primary source criticism in guidelines for navigating digital information. Educational websites may contrast a source's proximity to an event as a measure of reliability, and history textbooks tell us about the difference between primary and secondary sources (Nygren and Guath, 2019: 24), but all the resources on digital discernment I have found concerned assessing reliability of information rather than representability of expression. I include a selection of this kind of source in Norwegian and English as an appendix.

So far we have compared reading for information with reading for evidence in a value-neutral way, identifying their grammars and characteristics. But if our internet schooling really is dominated by secondary source criticism as my first soundings imply, a number of problems arise. In the following, I will criticise the use of online secondary sources in schools as (a) the reintroduction of authority; (b) producing passive pupils; (c) disregarding the significance of critical attention; and (d) neglecting the minority report. This kind of source criticism is not bad in itself, but is insufficient on its own.

Authority

Half a century ago, Paulo Freire rudely awoke educationalists with the noise of his unprecedented success in popular literacy and damning critique of the 'banking model' of education, which treats pupils as depositories of knowledge and teachers as investors. Pupils do not affect content when it is deposited, and so do not care about it or make it their own. The limitations of the teacher's knowledge also limit that of pupils. Freire showed that allowing pupils to investigate issues they care about on their own terms activates their own desire for knowledge, progress and enfranchised social participation (Freire, 1996). It was a seminal moment in the development of pedagogical constructivism.

The internet's arrival in the classroom felt like a continuation of this critique (Jahnke, 2016: 5; Engeness and Edwards, 2017: 652). No longer was the teacher a guardian of the treasure chest of knowledge, meting out tiny portions to avaricious pupils; the digital classroom gave pupils direct access to whatever information they required. As long as teachers vigilantly fended off falsities and unreliable sources, training their pupils to do the same, children could now search for and acquire the information that served their own educational needs.

There is much to be said for this appraisal of the situation, and mavericks such as Sugata Mitra have applied the method with great success (Mitra, 2013). However, if we apply Freire's critique to this new situation, the gains appear meagre. Pupils are admittedly able to take the initiative themselves to unlock the mysteries of knowledge, but the authority position has simply been replaced. Pupils are not necessarily developing their own views of the world; they are receiving the views of others, and storing them like deposit boxes. In Scardamalia and Bereiter's terms, they are not building knowledge, but reciting others' knowledge about the world (Scardamalia and Bereiter, 2005).

If we were to compare the situation to the arrival of a lorryload of textbooks, we can see the difference (Scardamalia and Bereiter, 2005: 98). Would we call such a delivery a revolution in pupil agency? Sure enough, teachers could then start to function as facilitators rather than authorities, but as long as the source of knowledge was still the licensed textbook, then pupils are still deposit boxes for someone else's information (Apple, 2014: 150–157 and *passim*).

Freire was not the first to criticise the banking view of education. Sixteen centuries ago, Augustine identified its insufficiencies. His point was not that it was inefficient or undemocratic, but that we simply do not learn by acquiring another's truth:

After all, who is so foolishly curious as to send his son to school to learn what the teacher thinks? When the teachers have explained by means of words all the disciplines they profess to teach, even the disciplines of virtue and of wisdom, then those who are called 'students' consider within themselves whether truths have been stated. They do so by looking upon the inner Truth, according to their abilities. That is therefore the point at which they learn. (Augustine, 1995: *de magistro* 14.45)

The very idea that pupils learn by listening to an authoritative source, be it teacher or webpage, ignores the pupil's own agency in deciding whether the source is true or false. And that can only be done on the basis of the pupil's educated or uneducated judgement and against the background of their personal negotiations with reality.

The task of education is therefore *both* to expose pupils to new sources of information *and* to develop good judgement in assessing what they say. Augustine assumes that the pupil does this by consulting truth, but secondary source criticism tends to do so by consulting reliability or conformity with existing belief. Like the sophists of antiquity who claimed to be experts on maths, politics, art and construction on the basis of their ability to give speeches, expertise in reading for information is a one-size-fits-all solution to all academic subjects. When correcting pupils' uninformed opinions on demography, this can be useful. When developing their ability to read literary texts, disastrous.

Passive pupils

Using the internet to find exclusively secondary sources encourages pupil passivity. Critical assessment of sources intervenes when the pupil is already faced with a webpage and can ask 'is this information believable?' However, learning also needs to take place before the pupil finds the source, while questions are still being asked.

Wrong questions necessarily produce wrong answers. If we were to google the question 'What colour is the national anthem?', we will only find wrong answers. Whether you ask a priest or a professor, you will not find a reliable answer, although if your interest is in synaesthetes rather than national anthems you may find a wealth of information.

Source criticism might even be misleading in these cases. It really is possible to make judgements about the reliability of certain sources when it comes to wrongheaded questions. For example, it makes sense to ask whether a resident of Hangzhou is a good or bad authority on the question 'Is learning Mandarin hard?'. Should we let Robert Downey Jr or Stan Lee answer the question 'Who is the best Avenger?' None of these questions have academic answers, so neither do they have educationally reliable secondary sources.

Being critical to secondary sources implies that there is a reliable answer, so a vital skill for today's pupils is to discern which questions can be googled and which cannot. When teaching Islam, I present my pupils with a list, some of which can be googled, some not, and some do not need googling. For example, it makes sense to ask the question whether the Koran recommends stoning. You need to find either a complete text or a reliable reader. However critical you are, however, you can not find a reliable answer to the question of whether Mohammed was a good person. Secondary sources making that judgement for you

tell us a great deal about themselves, nothing about the Prophet. Teaching source criticism without question criticism will not make that clear to pupils.

Teaching pupils to be critical towards their sources is an important part of the struggle for answers. There are many false answers in the world that need correcting, for the sake of our life together and our health. Unless we tackle false information about vaccinations, for example, we stand to lose many of the epidemiological gains of recent decades. But there is also a struggle for online questions which source criticism does not address at all. Unless pupils learn to ask the right questions, and to respectfully or angrily return the wrong ones, then their education will lead them into confusing situations. Even when the question is a good one, it is better that pupils learn the entire knowledge process of ‘What kinds of information and indices are going to answer this question?’ than that they simply learn whether this particular polished final answer is sufficient (Scardamalia and Bereiter, 2005: 101–102).

Attention

All this leads us to the financially and politically loaded struggle for online attention. Whether a website answers a question for us at all, it is reasonable to ask why we were even interested in the problem, how it became a problem, and – the archetypal question for our generation – is this even a thing?

Human attention and the formation of problems has philosophical pedigree. The selection of the objects of our attention may be a product of our governed mentality (Foucault, 2001: 1488–1490), economic and value system (Goodchild, 2007: 260), spirituality (Rytzler, 2019) or neuroses (Žižek, 2006). Questions that our sources persuade us to ask are not innocent.

We discussed above the lies my pupils searched for online concerning criminal activity falsely alleged to have been perpetrated by Muslims. So what would be the results of our asking the question of whether Muslims commit crime?

Of course Muslims commit crime. So do I. We have yet to discover an independent social variable that is distributed in absolute parallel with legal innocence. In a 2018 report, American researchers discovered that crimes perpetrated by Muslims received seven and a half times more media coverage than other kinds, all other variables being equal. It is correspondingly easier for pupils to find information about crimes committed by that social group. They are more visible (Rao et al., 2018).

The report’s other main finding was that Muslims in the US received four times longer sentences than others when found guilty of the same crime. Muslims are systematically discriminated against in law and on information highways.

It would be childish to conclude a causal relation between these two findings, but equally foolish to assume they are unrelated. On the contrary, it is likely that similar mechanisms are driving both asymmetries. What those mechanisms are bears discussing but in the meantime we should note that it is not only the published abuse or unfair treatment of particular groups that forms part of this discriminatory complex, it is attention. Our attention is not innocent.

When faced with search results giving us reliable information about minorities, how do we act in the classroom? Both correct information and misinformation concerning whether foreigners are criminal feed the hungry beast inside us that wants to decide who deserves a place in our community. Doubtless certain questions and misapprehensions need clearing up, but just as your first reaction to a jealous husband should not be to recommend the

services of an infinitely equipped private detective, the solution to problematic forms of media attention should be to step away from the keyboard and direct our educational scrutiny to the spotlight that has been lit for us. Slavoj Žižek never tires of reminding us that even if it were true that all immigrants were criminals, our collective suspicion of them would still be pathological (Žižek, 2006).

Critical reading for information does not address the issue of attention at all. It may help pupils to be suspicious of biased and narcissistic presentations and search results produced by malign agents and our own filter bubbles. It does not equip them to reject the issue itself. Secondary source criticism is not wrong, but insufficient to the complex task of learning truthfulness in the digital age.

Minority report

One issue we should return to sender is that of the inherent reliability of heterogeneous media. The discussion as to whether school pupils should quote Wikipedia is old (Blikstad-Balas, 2016: 594–595) and frustrated by that platform's development from factually-oriented social media to a formidable and multilingual hive mind.

Where did this question even come from? Are there really teachers out there working on a hierarchy of net-based sources per se, as if we could prefer *National Geographic* to the *Times Literary Supplement* regardless of whether we are discussing Fennel, Foucault or the fashion taste of Rupert Murdoch? Even single-author websites vary in reliability with the topic on hand, so much the more when the site is edited and authored by a myriad (here between 60 and 1500) legions.

The American report referred to above is a good example. The researchers took the best-case scenario, which is to say they chose media outlets they considered least likely to produce prejudiced results. Everyone has their own taste, but the hive-mind theory assumes that the greater the readership the more likely such obvious faults are to be detected and corrected (Rao et al., 2018). In the end, they chose the *New York Times* and the *Washington Post*. It is likely that, had they chosen the articles I have read in the past month, or all the newspapers published in London or Oslo regardless of quality or readership, they would have found a ratio of coverage of Muslim to non-Muslim criminality far greater than seven and a half to one.

The report was carried out under the auspices of a research organisation called the Institute for Social Policy and Understanding (ISPU), which seeks to conduct 'research, raising awareness, and working with partners to ensure our research and recommendations inform the good work of policymakers, the media, advocates, activists, community leaders and nonprofits'. This kind of research is needed because 'in a post-9/11 world, American Muslims face numerous challenges that prevent individuals from realizing their full potential. ISPU addresses these challenges through solution-seeking research, paving the way for a brighter future' (ISPU, 2019).

Confronted with such an organisation accusing the best of American journalism of openly racist coverage, a pupil skilled in lateral reading could be forgiven for reacting with a 'Well they *would* say that, wouldn't they?'. Secondary source criticism works by ascertaining how well placed sources are to deliver unbiased information about a given issue. The greater the resources commanded by a source, the better they are at delivering that information. The ISPU clearly prioritises a Muslim perspective on current affairs, and

such a small organisation is more susceptible to living in a filter bubble than global news agencies, but the question still remains: are their findings true?

Weighing up the reliability of the ISPU and the *New York Times* does not contribute one nanobyte to the debate concerning the data presented on balanced coverage of criminality in print media. To that aim, we would have to question their method, choice of source, or identify a mistake in its execution. Raising a suspicion is not the same as refuting an argument. Logical arguments and proof should surely outweigh mere suspicion. Of course people are allowed to defend their real-life position in the world through the use of reasoned argument. We would not disqualify feminists from public debate on the gender pay gap for being women.

Secondary source criticism – reading for information – is difficult, and the simplest ways of doing it are by lateral reading and unearthing a variety of sources. Lateral reading tells us if an author has a reason to deceive us. A variety of sources tells us if an author belongs to the consensus.

The pursuit of consensus is as problematic as uncovering reasons for bias independent of argument. When we adhere to the hive mind and embrace a consensus in class, we teach children a particular attitude to tradition and authority. But there is a wealth of possible attitudes to authority. In the Middle Ages, authority was respected as an argument in the absence of other knowledge, and had to be explicitly refuted when new discoveries were made. In the Enlightenment, new discoveries came so fast that scientists and philosophers relinquished the task of arguing with ancient authorities. In neither of these periods was consensus a reason to believe something if there were counter-arguments.

Our practices of knowledge shape our civilisation. If we teach pupils to disregard particular sources of knowledge because the majority of writers disagree with them, then we are asking them to ignore the kinds of minority report presented by all great scientists at the start of their career. However well equipped they are, pupils need to learn to assess arguments. General attitudes to polyvalent collections of sources are insufficient. Basic scepticism to internet sources helps us no more than basic trust: basic anything is unhelpful. The measles epidemic in Europe was caused by people trusting particular fallacious health advice available online; the Ebola epidemics of recent years by being sceptical to health advice. The majority of people and politicians did not take seriously the urgency of the climate catastrophe in the 1980s or 1990s, and they were tragically mistaken. Majorities make mistakes.

All this is admittedly an argument not against secondary criticism but against bad secondary criticism. It is difficult to get around the insufficiency of extreme vigilance that both reads laterally and identifies a consensus. Reading the internet for primary sources is, however, not vulnerable to this kind of weakness: readers make the conclusions themselves on the basis of observation rather than belief. With secondary source criticism, however, the assumption is that knowledge is unattainable for the pupil in any other form, which is a problematic educational starting point.

Conclusion

A 2013 study from Norway found that 75% of final semester humanities students could be easily enticed into serious plagiarism by cunning researchers planting ideal sources online and then correlating them with pupil essays on a given day (Skaar and Hammer, 2013). They found that as many as 75% break the law, that they are articulate in explaining their behaviour, and that the worse their mark in other subjects, the more likely pupils are to plagiarise.

How are we to explain this? Doubtless all of us, often rightly, choose easier solutions before harder. Did you check primary sources concerning religiosity and terror, as suggested in the introduction? Did I? The morality of pupil plagiarism is diffuse and undemanding in our culture. How to explain the fact that ‘students with higher grades plagiarised less than students with lower grades’, though (Skaar and Hammer, 2013: 23)? Is morality to be related to intelligence? Only the most gargantuan of Kantians would defend such a thesis, and even then none who have any experience of higher education and an ounce of honesty.

One hypothesis suggests itself: after 13 years of schooling, *pupils have no confidence in their own knowledge*. So many plagiarise because they have been persuaded that their own contribution to human knowledge will never amount to anything. Low marks merely underline this message, leading to further plagiarism. If 75% of pupils can be persuaded to break the law on account of this impression, then everyone is hearing it.

How has our educational system crash-landed so disastrously? Who dug the trench so deep that divides learners from knowers? Why have we and our pupils stopped believing in the ability of education to form knowledge-building agents?

Regardless of the history of this division, the results are clear: passive students, feeding on authoritative sources and defending their thoughts with reference to discursively strong authors. Our reply should be to call for a new enlightenment, with the slogan *aude sapere!* no longer merely for researchers and philosophers but for all lifelong learners. Dare to know! Dare to form conclusions based on what you see online, rather than on what you read!

What are the consequences of such a pedagogy? Surely they are familiar now. We need to teach pupils to examine what is happening in the world – not least the cyberworld – themselves rather than prioritise the existing explanations they are served up. How pupils search the net has to be a subject-specific skill. We need textbooks that do not simply model good answers, but that give complex tasks pupils need to answer themselves rather than search for a pre-existing answer. In a context in which information is cheap, our teaching materials need to be banks of questions rather than facts. Finding out the results of others’ investigation is effortless; conducting our own, arduous. Pupils need to be helped onto the bottom rung of that ladder rather than given photos from the top. Textbooks might model investigations or present simple tasks of interpretation before exposing pupils to the complex world of online expression and information. Pre-digested conclusions just add to the pile of phenomena to be accounted for.

One thing is certain: an increase in secondary source criticism will merely exacerbate this depressing lack of self-confidence among students leading to plagiarism. It plays into the hands of the new net journalism: fact-checking websites owned and maintained by precisely the kinds of authors who produce the content they are checking. The press is an essential part of modern democracy, but the educational use of journalistic self-regulation can not be assumed. It is to be hoped that modern education has a greater vision than providing audiences for this most narcissistic of consumer goods.

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Appendix: Some critical reading sources commonly cited by teachers in Norway

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- University of Agder, 'Information Expertise'. Available at: www.informasjonskompetanse.no/