

A reflective commentary of teaching critical thinking of privacy and surveillance in UK higher education

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Abstract

The importance of data literacy and the need of raising and improving it through formal educational channel or public engagement has repeatedly been flagged up in each of the past Economic and Social Research Council-funded Data-Psst! Seminar I attended in 2014–2016. There is a real demand for action taking. I took advantage of the knowledge I learned from the Data-Psst seminars and devised a module teaching Level 5 undergraduate media students about critical issues in today's data-centric digital society, including privacy and surveillance. In this article, I share how the class activities were devised and carried out, and how guided engagement with the current debate in privacy and surveillance were realised. I also draw on relevant pedagogical theories to discuss my educational approaches, student performance, the challenges of the project, and evaluate and reflect upon the outcomes. This report from the field provides fresh first-hand information about the data ethics of the younger public who are practising media arts and their behaviours and attitudes towards privacy and surveillance. This article shall open up the discussion about the role educators play in enriching public engagement with critical thinking about Big Data. The lessons learned can also contextualise the pedagogical implication of the recent scholarly research on Big Data and privacy, and provide a framework for constructing future collaborative or creative projects.

Keywords

Artivism, data literacy, higher education, pedagogy, privacy, surveillance

Introduction

The Economic and Social Research Council (ESRC)-funded Data-Psst! Seminar Series was a multi-disciplinary, multi-end user series of six full-day seminars conducted across 2014–2016 that focused on issues of contemporary transparency post-Snowden, especially those concerning privacy, security, sur/sous/veillance and trust. The importance of data literacy and the need of raising and improving it through formal educational channel or public engagement has repeatedly been flagged up in each of the past ESRC-funded Data-Psst! event I attended. There is a real demand for action taking. I took advantage of the knowledge I learned from the Data-Psst seminars and conceived a module for Level 5 undergraduate media students. In this article, I share how the class activities were devised and carried out, and how guided engagement with the current debate in privacy and surveillance were realised.

I draw on relevant pedagogical theories to discuss my pedagogical approaches, student performance, the challenges of the project, and evaluate and reflect upon the outcomes. Data sources for the study included observations, reflective narratives and student feedback. This report from the field provides fresh first-hand information about the data ethics of the younger public who are practising media arts and

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their behaviours and attitudes towards privacy and surveillance. This article shall open up the discussion about the role educators play in enriching public engagement with critical thinking about Big Data. The lessons learned can also contextualise the pedagogical implication of the recent scholarly research on Big Data and privacy, and provide a framework for constructing future collaborative or creative projects.

Positioning ‘Privacy and Surveillance’ in art education

Privacy has always been an important subject in art education. Without private spaces, it is difficult for the self to develop and to form an identity. For example, many photographic works have explored the notions of privacy and intimate moments, various ‘veilance’ practices of seeing and being seen (Phillips, 2010). These artworks have invoked debates about the relationship and power dynamics between those who are watched and those who watch, voyeuristic fascination, the notions of self, secrecy, and the boundary of the private and the public. Media workers (journalists and documentary makers) also have to balance the fine line between public interest / public’s right to know, and not invading other people’s privacy.

The discussion about privacy has been shifted to a different level in recent years after Snowden revealed the surveillance activities of the US and UK governments. Pervasive and prevalent state-led surveillance and surveillance conducted by social media companies have made privacy and surveillance a personal as well as a political issue. Black-boxed algorithms play an important role in controlling what data are captured, processed, analysed, used and reused (Pasquale, 2015). Given this, educators have a responsibility of inspiring and guiding future generation thinkers to think critically about everyday practices in a data-centric society. Non-governmental or non-profit organisations such as the Open Rights Group and Mozilla’s Knight Foundation have organised grassroots’ activities for raising awareness of online privacy. Mozilla, for example, organised ‘Mozilla’s Privacy Month’ teaching the concept of privacy with the goals of increasing web literacy, empowering netizens (users of the web) to protect their data, control their digital footprint, raising awareness of online tracking (see <https://blog.webmaker.org/teachable-moment-privacy-month>). Cryptoparties have taken place in many cities. However, few reports have been about how educators in formal institutions are making a difference in engaging people in pondering issues surrounding Big Data, privacy and surveillance. This article aims to initiate a dialogue between activist-educators.

The power of artist approaches and the design rationale

One of the goals of art education is to inspire ‘creative responses’ to societal issues. Teaching privacy and surveillance to artists also has ethical and social implications.

The liberal arts approaches have been proven effective in getting students to think independently in disciplines other than arts (e.g., economics, management). The liberal arts methods can direct students to reach the educational objectives that Bloom et al. (1956) delineates in his taxonomy: moving from knowledge, comprehension, application, analysis, synthesis, and finally evaluation.¹

To reach the ultimate goal in Bloom’s taxonomy (i.e. creation – producing new or original works), liberal arts approaches have been advocated by educators such as Greene (2006, 2007). Greene praises liberal arts methods and their utility in stimulating social imagination. She argues that ‘imagination is the capacity to break with the ordinary, the given, the taken-for-granted and open doors to possibility’ (Greene, 2007: 1). Greene (1993) believes that artistic inquiry and engagement is a means to achieve democratic ideals of equity and inclusion, offering us the option to challenge the controlled. Several educators have also demonstrated the potential the arts have to interact or converse with literacy learning in meaningful and transformative ways (Barton, 2014; Caldwell and Vaughan, 2011; Ewing, 2010); creating arts is a useful way to engage adult learners in critical thinking and problem solving through experiential learning (learning by doing).

Grounding art in the political landscape gives it an activist, action-oriented role. There have been examples illustrating how combining art and activism (hence the term ‘*artivism*’, see Klanten, 2011; Sandoval and Latorre, 2008) can mobilise community resources and lead to positive community change (e.g., Ginwright and Cammorota, 2007; Rhoades, 2012; Sandoval and Latorre, 2008). Using digital media to communicate messages, as Sandoval and Latorre (2008) argue, can ‘provide access to a myriad of cultures, languages, and understandings’ and hence allow people to ‘explore the organic relationship between art and activism, negotiating multiple worldviews’ (p. 83).

My design of the curriculum on media law and regulation and digital data society aimed to help students develop their ‘*critical civic praxis*’ (Ginwright and Cammorota, 2007). Through learning what happened in media history and society, they gained knowledge and ability to observe and recall information (Tier 1, Figure 1). They then had to understand the meanings, translating knowledge into new contexts, interpreting,

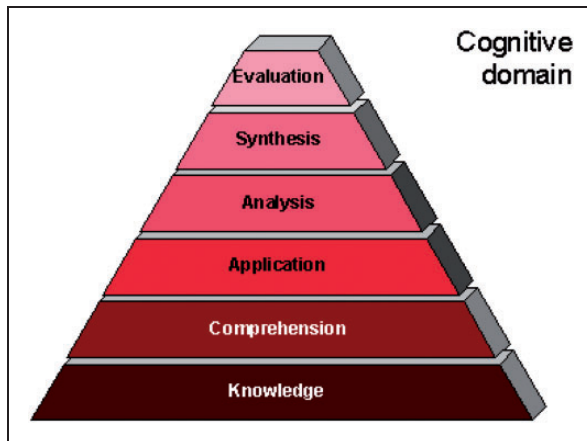


Figure 1. Bloom's taxonomy of cognitive domain (1956).

comparing, contrasting, ordering, grouping, inferring from and predicting from information (comprehension, tier 2, Figure 1). Then, they used information, methods, concepts, and theories in new situations (application, tier 3, Figure 1). They needed to develop the ability to recognise and organise information into patterns (analysis, tier 4, Figure 1), to combine or recombine ideas in order to generate new ideas, theories or concepts (synthesis, tier 5, Figure 1), and finally to compare and discriminate between ideas, as well as assess the value of theories and evidence (evaluation, tier 6, Figure 1). The role of the tutors, as noted by Ginwright and Cammorota (2007), is to guide the students to 'use activism as a powerful tactic for reaching broader audiences with narratives, experiences, and perspectives that contradict and complicate dominant ones'.

The implementation of the pedagogical framework

The module 'Digital Futures' covering emergent technologies and critical issues in digital society was compulsory to 13 Level 5 students reading media at a specialist arts university. Some of them are practising creative writing, others media production. Seven of these students had to attend another module called 'Media Law and Regulations' where they examined Data Retention and Investigatory Power Act (DRIPA) and the Digital Economy Act (DEA) closely.

I wanted to design a learning experience that was relevant, fun and effective. Otherwise, learning privacy and surveillance (very political subjects) would be disconnected and leads to disengagement. In addition to didactic lectures containing materials borrowed from the ESRC Data-Psst website (<http://data-psst.bangor.ac.uk/>), we had artist talks on activism (introducing artworks from street artists such as Banksy) and

different kinds of 'veillance' practices (e.g., Mann, 2013), and how 'viewing', 'gaze' was visualised. We also had seminar discussion after screening of documentaries and films about surveillance (e.g., Channel Four's *Hunted*, 2015; the documentary '*Citizenfour*', 2014; Edward Snowden's Christmas Speech 2013 (Alternative Christmas Message by Edward Snowden, 2013), BBC Panorama's interview with Edward Snowden (Panorama Edward Snowden: Spies and the Law, 2015), BBC Panorama's episode on WikiLeaks and Julian Assange (Panorama: WikiLeaks: The Secret Story, 2011), *The Internet's Own Boy: The Story of Arron Swartz*, 2014). We went on a fieldtrip to the Big Bang Data exhibition at the Somerset House in London in March 2016. These activities used materials out there in everyday life to illustrate serious subjects such as privacy and surveillance.

The assignment required students to share their interpretations of 'privacy' in today's digital society using visual languages. This linked with their digital media practices (media production, creative writing). They could voice their views on video sharing websites such as YouTube and Vimeo. Then, they had to turn the message into an interactive piece, creating deeper engagement with the general public. The works created have included quizzes, games (narrative-based choice-based games), photographic screening and performing art.

All these different learning activities and content were put together to deliver a holistic and coherent learning experience. The topics were approached from different angles: legal, art, sociological, political, technical and anthropological. From the pedagogical perspective, the assessment, the learning content and the learning aims and outcomes are designed in order to achieve what Biggs terms 'constructive alignment' (Biggs, 1999, 2003).

Outcome – Examples of student works

Some original and playful responses had been submitted. Under each URL, I explain why it is interesting from the perspective of: (a) student understanding of privacy, veillance and Big Data; and also (b) how well it has communicated abstract ideas on data surveillance.

<https://youtu.be/n5TQ1EYgcm8>

This is an example illustrating a journalistic style. The maker interviewed fellow students their understanding of terms of services of mobile apps. Inspired by the #PrivacyProject (<https://www.youtube.com/watch?v=ZcjtEKNP05c>), this student recorded similar expressions and emotions when interviewees on the street read the terms of services on their phone out loud.

<https://www.youtube.com/watch?v=9ij2JTC8Y3A>

This example illustrates student's concern over 'being catfished' (identity theft). Their idea about privacy invasion is when their personal information and identity was stolen and abused.

<https://vimeo.com/149265579>

This poetic but critical film 'NIGELLA' demonstrates the student's artistic interpretation of the history of state surveillance. It offers a historical view through remixing photographic shoots and archival materials.

https://youtu.be/dswcOI_K05k

In this video, the student provided a fictional narrative about how a girl's privacy was invaded while she was stalked by a man. The simple narrative did capture the uneasiness of being watched and followed.

https://www.youtube.com/watch?v=Fac3UuVYGyQ&feature=em-upload_owner

In a fictional drama style, the video shows that privacy being invaded is like someone burgled into your house and went through your possessions.

<http://philome.la/MediaUCA/age-of-privacy-by-alex-howard/play>

This choice-based game engaged players to explore privacy issues through narrative-driven storytelling.

Reflection

The result shows that the students have grasped the concepts of privacy, data society and surveillance to a good level. They have become more aware of the consequences of their digital footprints. They have achieved the level of 'application' (tier 3) in Bloom's taxonomy. The student feedback suggests that the curriculum designed was coherent, informative and engaging. However, there is a gap between the student achievement and the top tier 'creation' and 'evaluation' in Bloom's taxonomy. This shows that critical thinking and synthesis of creative practices and theoretical understanding are not skills easy to acquire. Students also mentioned that the challenge lies in creation – how to come up with a killer idea to deliver a powerful message is difficult. That shows that awareness is one thing, but putting that awareness into action is another thing. Creating arts to provoke the audience to question the nature of privacy and the purpose of surveillance is even harder.

A pedagogy for *artivism* requires students to have the awareness, the courage to act out their conscience, apply their understanding and interpretation in the context in order to make a difference, make some impact. I think the effectiveness of an activist education was impeded in this case because of different ethics, morality and conscience. In their reflective commentaries, many students said that since they could do nothing about government's surveillance policy, they would be happy for their data to be collected in the

name of national security. I was shocked to discover how few of them cared about being watched by the big brother, especially after how much emphasis has been placed on the notoriety of the DRIPA, and the DEA, the two laws that give the British government right to spy and monitor ordinary people's (online) activities. A majority of them think that, as long as it is for the greater good of the public (for public security and safety), it is justifiable for the government to collect and retain massive amount of data.

Even if the responses from the students could have been varied if the questions were framed differently, this outcome still shows that (1) it is difficult to challenge the mainstream discourse that the government produces – if you have done nothing wrong, you have nothing to hide, you have nothing to worry about; (2) young people feel powerless to challenge the state or change the situation even if they are aware of everyday surveillance. To the so-called 'digital natives' do not seem to be very bothered by the scandalous governmental conduct exposed by E Snowden. Facing the trade off of national security and personal privacy, they are happy for their privacy to be compromised. As some of them believe, privacy is dead anyway (Cole, 2015; Meeks, 2000; Preston, 2014).

Concluding remarks

In the report 'Public Feeling on Privacy, Security and Surveillance' published in 2015 by DATA-Psst and DCSS, the British public's concern over UK state surveillance of digital communications and online privacy has been highlighted. "The EU and UK public think that although certain surveillance technologies are useful/effective for combating national security threat, they compromise human rights and are abused by security agencies." (Bakir et al., 2015: 4) "Targeted rather than blanket surveillance is preferred, as are clear communications to citizens about what is going on, with strong regulatory oversight." (Bakir et al., 2015: 5). These findings echo other project reports, including the EU project 'Surveillance, Privacy and Security' (SurPRISE) (Degli Esposti, 2015), which examined the relationship between security and privacy, the report 'Ethics of Security and Surveillance Technologies' published by the European Group on Ethics in Science and New Technologies (Dratwa, 2014) and the "The Right to Privacy in the Digital Age" report of the Office of the United Nations High Commissioner for Human Rights (United Nations, 2014).

Nonetheless, the field study on my teaching practice suggests that we need different strategies to engage young people in the debate. Their experiences (with digital media and public affairs), individual behaviours

and attitudes shape how they make ethical choices which are different from other social groups and generations (Zwitter, 2014). Contextualised and targeted strategies are thus required for campaigning for maximising the effectiveness of communicating the complexities of the issues at hand to these different audiences.

Finally, I would like to emphasise the importance of the collaboration between activists (or artists) and educators or a dual role of an educator and an activist. An activist approach is a collaborative, interdisciplinary or multi-disciplinary method for addressing complicated socio-technical issues such as data surveillance and privacy.

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Notes

1. A revised taxonomy is published in 2001 edited by Anderson and Krathwohl (2001) has replaced this order with remember, understand, apply, analyse, evaluate and create.

References

- Alternative Christmas Message by Edward Snowden (2013) Channel 4.
- Anderson LW and Krathwohl D (eds) (2001) *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York, NY: Longman.
- Bakir V, Cable J, Dencik L, et al. (2015) *Public feeling on privacy, security and surveillance: a report by DATA-PSST and DCSS*. Project Report, Cardiff University and Bangor University. Available at: <http://orca.cf.ac.uk/87335/> (accessed 1 November 2016).
- Barton GM (2014) The arts and literacy: Interpretation and expression of symbolic form. In: Barton GM (ed.) *Literacy in the Arts: Rethorising Learning and Teaching*. Zurich, Switzerland: Springer International Publishing, pp. 3–20.
- Biggs JB (1999) *Teaching for Quality Learning at University*. Buckingham: Open University Press.
- Biggs JB (2003) *Teaching for Quality Learning at University*. 2nd ed. Buckingham: Open University Press/Society for Research into Higher Education.
- Bloom B, Englehart M, Furst E, et al. (1956) *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain*. New York, NY: Longmans, Green.
- Caldwell B and Vaughan T (2011) *Transforming Literacy through the Arts*. London: Routledge.
- Citizenfour* (2014) Directed by Laura Poitras. [Film].
- Cole D (2015) 'Is privacy obsolete?' *The Nation*. Available at: <http://www.thenation.com/article/privacy-20-surveillance-digital-age/> (accessed 31 May 2016).
- Degli Esposti S (2015) Surprise: Brief overview of project results. Presented at the *8th computer, privacy and data protection conference (CPDP)*, Brussels, Belgium, 10–12 January.
- Dratwa J (ed.) (2014) *Ethics of Security and Surveillance Technologies. European Group on Ethics in Science and New Technologies to the European Commission*. Brussels, Belgium: European Union.
- Ewing R (2010) *The Arts and Australian Education: Realising Potential*. Camberwell: Australian Council for Educational Research.
- Ginwright S and Cammorota J (2007) Youth activism in the urban community: Learning critical civic praxis within community organizations. *International Journal of Qualitative Studies in Education* 20(6): 693–710.
- Greene M (1993) Diversity and inclusion: Toward a curriculum for human beings. *Teachers College Record* 95: 211–221.
- Greene M (2006) From jagged landscapes to possibility. *Journal of Educational Controversy* 1(1) Available at: <http://cedar.wvu.edu/jec/vol1/iss1/2/> (accessed 1 November 2016).
- Greene M (2007) Imagination and the healing arts. Available at: https://maxinegreene.org/uploads/library/imagination_ha.pdf (accessed 1 November 2016).
- Hunted (2015) (TV Series). Channel 4.
- Klanten R (ed.) (2011) *Art & Agenda: Political Art and Activism*. London: Gestalten.
- Mann S (2013) Veillance and reciprocal transparency: surveillance versus sousveillance, AR Glass, Lifelogging, and wearable computing. Available at: <http://wearcam.org/veillance/veillance.pdf> (accessed 31 December 2016).
- Meeks BN (2000) Is privacy possible in the digital age? If it isn't dead, then it's hanging on by a thread. NBCNews.com. Available at: <http://www.nbcnews.com/id/3078854/t/privacy-possible-digital-age/#.V02YynUrLWU> (accessed 31 May 2016).
- Panorama: Edward Snowden: Spies and the Law (2015) Reported by Peter Taylor and produced by Howard Bradburn. *BBC One*.
- Panorama: WikiLeaks: The Secret Story (2011) Reported by Jim Booth and John Sweeney. Produced by Stephen McQuillan. *BBC One*.
- Pasquale F (2015) *The Black Box Society: The Secret Algorithms that Control Money and Information*. Cambridge, MA: Harvard University Press.
- Phillips SS (ed.) (2010) *Exposed: Voyeurism, Surveillance, and the Camera Since 1870*. San Francisco, CA: San Francisco Museum of Modern Art and Yale University Press.
- Preston A (2014) The death of privacy. *The Observer*. Available at: <http://www.theguardian.com/world/2014/aug/03/internet-death-privacy-google-facebook-alex-preston> (accessed 31 May 2016).
- Rhoades M (2012) LGBTQ youth + video activism: arts-based critical civic praxis. *Studies in Art Education* 53(4): 317–329.

- Sandoval C and Latorre G (2008) Chicana/o activism: Judy Baca's digital work with youth of color. In: Everett A, The John D and Catherine T (eds) *Learning Race and Ethnicity: Youth and Digital Media*. MacArthur Foundation Series on Digital Media and Learning. Cambridge, MA: The MIT Press, pp. 81–108.
- The Internet's Own Boy: The Story of Aaron Swartz (2014) Directed by Brian Knappenberger (Film).
- United Nations (2014) The right to privacy in the digital age. Report of the Office of the United Nations High Commissioner for Human Rights. United Nations Human Rights Council.
- Zwitter A (2014) Big data ethics. *Big Data & Society* 1(2): 1–6.