House of Lords Select Committee on Democracy and Digital Technologies

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Consultation response

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Authors:

- **James Craske**[1] (Research Associate at the Centre for Competition Policy; Doctoral Researcher in the Schools of Education and Lifelong Learning; Politics, Philosophy, Language and Communication Studies)
- **Dr Harry T. Dyer** (Lecturer in Education at the School of Education and Lifelong Learning)
- **Janis Loschmann** (Doctoral Researcher in the School of Politics, Philosophy, Language and Communication Studies)

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As academics, we welcome explicit citation and sharing of this consultation response and the research cited within it. If you would like to discuss the evidence in more detail, please feel free to approach us.

[1] James Craske. j.craske@uea.ac.uk

Consultation Response to the House of Lords Select Committee on Democracy and Digital Technologies

1. We welcome the opportunity to respond to this timely consultation. Given our academic backgrounds and professional experience, we focus our attention on questions 3 and 12-14. For question 3, we begin by outlining the three underpinning principles that inform our following recommendations on how specific subjects in the school curriculum, mainly how Citizenship and English can provide a resource for teaching digital literacy. Proficiency in digital technology involves familiarity with the technology; a complete understanding, however, comes from paying attention to how digital technology is embedded in political communication and shaped by economic forces. We also respond to questions 12-14 by arguing that any attempt to use digital technology to engage with citizens must do so with an understanding that technology is imbued with and reinforces existing inequalities and hierarchies. This theme is something the terms of reference should overtly address if governments and civil society groups want to reach disadvantaged communities.

3) What role should every stage of education play in helping to create a healthy, active, digitally literate democracy? *(Janis Loschmann and James Craske)*

Part One: Broad Principles: Education for Digital Literacy

2. Janis Loschmann's research analyses how, in the digital age, information is the 'digital gold' that has now become the primary source of value in our social and economic life (2019). Technology has made knowledge increasingly accessible and abundant. The scarce resource in the digital age is human attention. In the information age, human attention is being fought over by competing digital platforms (from social media Facebook, Snapchat, to entertainment (Netflix) or hybrids like Youtube. This means we need to equip students with the ability to understand how their attention is being directed, manipulated, and what techniques are being used and to what end. To put it in a simplified way, understanding that the autoplay feature on YouTube is essential for its economic survival and depends on gaining and keeping your attention has ramifications for how one understands Youtube as a source of knowledge and as a tool for its dissemination. In other words, students need to understand the political, economic and value (axiological) basis of technologies that they use every day and that serve as an interface between them and the world. Below we outline three key areas that are important for framing debates around digital society and education.

I. Understand the **languages of information**: mathematics, programming, music, graphics etc. How knowledge is used and understood depends on how it is designed, and these are the languages that digital curators of knowledge are proficient. But we should also pay attention to a field that is often neglected: visual literacy. By this, we mean the skill to interpret images: understanding how ideas and emotions are expressed through the visual form (video, film, Youtube). Understanding the technical grammar of the visual form helps to show how attention is gained and directed. Social media is saturated with images that promote narratives and imbue values and even world views. Images are powerful and emotionally resonant and cultivating self-awareness of this is essential.

II. Greater emphasis on **epistemic skills**: introduce philosophical education at every stage of schooling. A model here could be the IB compulsory subject Theory of Knowledge (TOK). This interdisciplinary subject gives students the skills to evaluate different areas of knowledge and their strengths and weaknesses. It is not merely a case of identifying fake or alternative facts, although this is an essential element (the critical skills of philosophy

come in handy here), understanding the frameworks and contexts within which knowledge arises. This type of learning gives students different epistemic perspectives. It also understands the nature of knowledge and evaluates different kinds of knowledge claims. In a world where knowledge is over-abundant with swathes of encyclopaedia entries being able to critically understand the *origin* and *purpose* of knowledge and its corresponding *value* and *limitations* is paramount.

III. Emphasise skills **developing creative control over information**: "skills education" is often framed in terms of skills vs knowledge. Both are important; the first two points above outlined ways in which to frame thinking about knowledge and skills in the context of digital society. But they both treat students as passive recipients. What is needed today are students that not only know how to understand and analyse knowledge ready at hand but also how to develop 'knowledge *ability*' – essentially 'skills' required to effectively create, design and transform information. It is not consumers and users of knowledge but producers and designers of it that will shape the world we live in, what motives are served by those designs, and how effectively it is used. This means that we need to move away from framing the education debate in terms of *skills* vs *knowledge* and instead in terms of how both *knowing how* and *knowing that* can contribute to developing the knowledge and skill set of the knowledge curators of tomorrow.

3. This takes us full circle to the first point; education policy should be framed in terms of how best to develop proficiency in the different languages in which information is transmitted, produced, manipulated and shared. This is primarily not a matter of *skills* or *knowledge* but creative *ability* – *e*ducation debate framed in terms of *knowing that* and *knowing how* or between *skills* and *knowledge.* We need to transcend this dichotomy even if creative *ability* relies on the development of both these knowledge and skills.

Part Two: School Curriculum and Delivery

4. **The education debate is often framed in terms of either *knowing that* and *knowing how* or between *skills* and *knowledge.* We need to transcend this dichotomy and find subjects that allow a pupil to develop creative ability towards digital technology.**

5. Current education thinking emphasises that subjects should be thought of as coherent bodies of core knowledge. In terms of *knowing that* the most important thing to realise is that information always requires some older background information in order to be contextualised and made useful enough to be engaged with critically. Though something like the Finnish model has found success by producing a highly interdisciplinary curriculum, we still think that within English schooling, there is value in individual subjects but only when there is a recognition that some subjects (such as citizenship, history and English), can be adaptable and contain contested bodies of knowledge. These subjects might be fruitfully used to reflect a serious attempt to equip young people with what is needed to develop comprehensive digital literacy (including mastery visual literacy and taught about the situated awareness of its political, economic and axiological bases).

6. Citizenship. We consider citizenship education highly important and currently undervalued in English schooling. Bernard Crick, who led the advisory group on "Education for Citizenship" that helped shape statutory Citizenship for all students aged 11 till 16 in 2002, warned that 'we should not, must not, dare not, be complacent about the health and future of British democracy. Unless we become a nation of engaged citizens, our democracy is not secure' (Crick, 1998, 8). Two decades on Citizenship has been relegated as a school subject at a time we most need it. Instead, it should be revitalised with digital literacy as a core component. This might start with teaching

political literacy in early schooling (concepts, how democracy works, institutions etc). Once this body of knowledge has been grasped, and the further a pupil goes through their schooling, the more opportunity there should be to discuss citizenship and "digital literacy" within the principles outlined in Part One. Citizenship should be made as interdisciplinary (whilst maintaining coherence) and teach the specific ways in which history, geography, and politics have shaped our society and culture. Moreover, it should reflect on how digital technology has altered campaigning, political communication and the distribution of information through algorithms. Our relationship to digital technologies, data and advertising has radically changed given that *we* are now the product (see Lanchester, 2017); our digital literacy should reflect this fact and its implications for us as citizens and consumers.

7. English. In his research, James Craske (2019) has observed how secondary English teachers draw on platforms such as YouTube to introduce "Beat Poetry" and biographical pieces on poets such as Ted Hughes. Often, however, and within the current secondary curriculum, the use of platforms is confined to a 'thin' pedagogic tool. The 2013 GCSE English reform changes removed studying media, visual and online text from the curriculum and this has acted to deter teachers from fully exploring the importance of visual literacy in forms such as social media advertising. English language includes teaching persuasive writing techniques; the subject should extend to this to looking at how images are curated with text, audio and tropes in order to achieve a specific effect such as pathos. Studying various media has been applied in previous curricular (and has been part of the discussion about the subject since the 1930s). In our view, there was no compelling case given to entirely remove it. Learning to decode multimodal messages and checking for their veracity is an important skill that could be developed[2], set in a framework about how this knowledge arises.

8. Education for Digital Literacy: Confining the teaching of digital literacy to assemblies, outreach events or one-off days would not likely provide the adequate time and tools to work through how digital technology impacts on a young person's engagement with it as a citizen. Instead, to ensure consistency across all schools, there should be a mandatory syllabus. This syllabus would include the body of knowledge for political and digital literacy. School subjects should aid pupils to understand themselves in a broader social context, such as citizens of a wider community, in order to instil a sense of belonging and civic identity as well as a civic responsibility. After all, you can't look up how to be a good citizen on Wikipedia. So, the key question is what type of knowledge, independent of it being able to be looked up on Wikipedia, must a student be equipped with? Citizenship as a subject would be ideally placed to take on this task – though subjects such as English might usefully tackle visual literacy, online text, moving image and knowledge claims.

9. We would also argue, though there is not space to elaborate here, that just because we are talking about "digital" technology, this does not mean that we must only think in terms of "digital solutions". Part of democratic breakdown and polarisation is because there is no genuine perception that one shares a common set of values and epistemic assumptions about the world with others. This is an irony of the digitally collected world, but it becomes clearer once we realise that digital technology continues to individuate us through greater personalisation and nudge effects. A civic year after leaving school might be one avenue to explore. Within schools and outside of them: our aim should be to produce not cosmopolitan *citizens of nowhere* but citizens firmly rooted in their local society but who have international cultural literacy. We need to enable

[2] Teaching children to recognise 'what is true from what is not' has been brought up by the OECD (Andreas Schleicher quoted in Siddique, 2017).

a narrative identity that provides pupils with an understanding of the core values of our culture and the things that we all have in common regardless of our idiosyncratic background.

Response to Questions 12-14 *(Harry T. Dyer)*

10. In its terms of reference, the consultation asks about technology and democratic engagement (questions 12-14). Digital technologies may open up exciting avenues for civil society groups, politicians and policymakers to engage with the public. What is missing from this consultation, however, is a consideration of how users create personal and unique experiences with, through, and within technology, grounded in their socio-cultural realities (Bar, Weber, & Pisani 2016). As I show with examples, our interactions are in some way, guided, constrained, and shaped by the technology available for us to express ourselves through and with it. Any engagement proposed as a way of increasing democratic engagement should not ignore the socio-cultural resources of users. Rather, as Chaudry (2015) notes, users approach, utilise, and understand social media differently, as a result of the socio-cultural resources they bring with them when they approach social media. This provides a large challenge to many stakeholders; policymakers, platform designers, businesses, and my own field - educational practitioners. This is nonetheless a challenge that is all too often ignored as technology is thrown at a citizen or student as a catch-all panacea. Individual differences are side-lined or disregarded in the hope that merely introducing technology will be enough.

11. My research in this area has highlighted that technology is shaping the way students understand and experience universities as social, academic, and physical spaces, but that this is mediated in many nuanced ways by socio-cultural and socio-economic factors (Dyer 2019). I would urge careful consideration of any intervention that is stripped from a socio-cultural context and impacts. Any intervention must consider how socio-culturally grounded users and designed technologies enmesh.

12. Digital technology is not neutral; it exacerbates existing power hierarchies

13. In 1996, John Perry Barlow wrote and released his much-cited 'Declaration of the Independence of Cyberspace'. The short but provocative work sets out what the internet is and how it should be understood by users and governments. In one particularly telling paragraph, Barlow declares the following statement:

> *We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth* (Barlow, 1996)

14. Though admirable and understandable as a position, it is clear the internet cannot be viewed this way. It is apparent that socio-cultural and socio-economic resources shape how we use and experience technology. In this style, it is worth reflecting upon Melvin Kranzberg's (1986) first law of technology: 'technology is neither good, nor bad, nor is it neutral'. Though this may seem purposefully obfuscated, Kranzberg does frame his work as a nuanced look beyond 'technological determinism' - the idea that technology shapes our experiences in a one-way manner. Instead, Kranzberg's aim was to consider how technology is experienced differently by users across socio-cultural divides:

> *Technology's interaction with the social ecology is such that technical developments frequently have environmental, social, and human consequences that go far beyond the immediate purposes of the technical devices and practices themselves, and the same technology can have quite different*

> *results when introduced into different contexts or under different circumstances* (Kranzberg 1986, 545-546)

15. Written in 1986, Kranzberg nonetheless foresaw the need to consider the way technology is experienced within socio-cultural and socio-economic contexts. Today, such divides are being seen in real-time, with emerging technologies such as the Internet of things (IoT) being experienced differently across socio-economic divides (van der Zeeuw, van Deursen, & Jansen 2019). Van Deursen & Mossberger (2018, 122) note that the "comparative advantages of the IoT to people will vary based on differentiated skills and resources, enabling smaller groups of people to benefit, and disadvantaging others in new ways". Whilst technology may be shaping all of our collective experiences, as Wajcman & Dodd (2017, 3) aptly note, the "powerful are fast, the powerless are slow".

16. Socio-technical Inequality

17. Importantly, even seemingly inconsequential technological systems are not devoid of impacting different communities differently and are not created in a vacuum separated from socio-cultural reality. Instead, these technologies have exacerbated extant social disparities in both intended and unintended ways. This point is made by Safiya Umoja Noble (2018, 1) in her recent book 'Algorithms of Oppression', the introduction of which notes that "on the Internet and in our everyday uses of technology, discrimination is also embedded in computer code and, increasingly, in artificial intelligence technologies that we are reliant on, by choice or not". Noble provides detailed examples of how search engines extend and exacerbate bias around the presentation of gender and race, effectively privileging whiteness. Similar trends have been noted by a number of researchers. Patton et al. (2017, 3) point to the website 'Geofeedia', a location-based social platforms which pinpoint hotspots of expected crime and trouble that these platforms:

> *exclude communities of color and by so doing turns the technological gaze on them...If communities of color are socially constructed as problematic sites, then this is where the technological gaze goes, in anticipation of a problem – the social controls morphing into punitive cognitive controls*

18. These new ways of experiencing, augmenting, and understanding social interaction are rife with their own socio-cultural biases which subsequently mean that not every user experiences these interactions nor relates to these technologies in the same manner. Cases have been documented, for example, of the systemic racial inequalities that manifest themselves when people of colour (PoC) attempt to play Pokemon Go. In white neighbourhoods, PoC are treated as if they are acting suspiciously (Crockett, 2016), In predominantly PoC neighbourhoods, Pokemon Go has been noted to have a lack of in-game resources like PokeStops and Gyms compared to white neighbourhoods (Akhtar 2016). Others still have found ride-sharing apps like Uber discriminate against women and PoC (Ge, Knittel, MacKenzie, & Zoepf 2016). In this manner, technology exacerbates and creates manifestations of extant socio-cultural divides, emphasising some voices and ways of being social and minimizing others. Added to other socio-economic inequalities around access to technology and data, these technologies become enmeshed into complex socio-technical assemblages which can present new social dynamics and exacerbate extant issues. As such, any 'solutions' to digital engagement should not be presented in a way that is blind to which voices might be emphasised and minimised by any intervention, nor to which voices are currently being emphasised and minimised in the democratic process.

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