



Zooming in on Dewey, Democracy, and Subjectivity in Postdigital Education

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Accepted: 22 August 2023
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Abstract

Digital tools, such as video conference technology, are currently transforming people's behaviour, social relations, and learning processes in higher education. But the digital tools used in teaching and learning are also part of a dynamic capitalism. This article focuses on democracy and subjectivity in higher education and outlines a critical approach in this context. I revisit John Dewey's philosophy to reflect on digital tools and the goals of education in a democratic society. Published more than a century ago, Dewey's seminal book *Democracy and Education* is relevant as a constructive approach to combining learning, experience, habits, and tools. Dewey argued that dualisms between mind and matter, knowledge and nature, undermine a democratic society. For Dewey, a society would require communication and the sharing of experiences whilst education would require democratic aims beyond the individual. Yet the contemporary challenges include a 'digital gaze' where the technology makes subjects more visible and observed. Foucault's analytics of power thus becomes a constructive supplement to Dewey's focus on participation and modes of inquiry to fully examine subjectivity and democracy in postdigital higher education.

Keywords Postdigital · John Dewey · Knowledge · Higher education · Digital tools · Foucault

Introduction

Digital technology is integral to a political economy in which profit is earned by the way individuals make use of the tools to organise their work, relate to others, and carry out their everyday activities (Ford and Jandrić 2021; Knox 2019; Srnicek 2017; Zuboff 2022). Higher education is in the middle of this development, where it deals with competing discourses. On the one hand is a technological instrumentalism

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where technology offers solutions to everything, including learning. On the other hand are more dystopic views about a type of ‘surveillance capitalism’ where users are exploited and their behaviour can be modified (Zuboff 2019).

These developments call for revisiting philosophical ideas about subjectivity and democratic goals of education. In this article, I argue that John Dewey’s original thought and systematic conceptual repertoire offer a possibility to connect educational practices with democratic ideals in a postdigital context. As Selwyn and Jandrić point out (2020), Dewey developed a pragmatist philosophy that deals with practices, habits, and educational growth. Dewey’s approach moves beyond the rhetoric of learning as a goal in itself (Biesta 2005) and learning as a matter of individualised and neoliberal self-renewal. Today’s postdigital condition, marked by a certain fatigue about technology-driven societies (Selwyn 2019b: 24), non-predictability, and messiness (Jandrić et al. 2018: 895), is well suited for revisiting Dewey’s ideas.

When it comes to the changing conditions for higher education, the Covid-19 crisis was an eye-opener. The social distancing policies triggered a swift and comprehensive transition to online platforms, and Big Tech companies extended their power as remote teaching became the norm (Klinge et al. 2022; Jandrić et al. 2022; Muldoon 2022; Taglietti et al. 2021; Tschaepe 2020; Watermeyer et al. 2021). Class interactions involved typing on devices, black screens, and the creation of the new performative self (either by displaying bookshelves, ceilings, or makeup) at an unforeseen scale. Unequal Internet connectivity rendered inequality, yet students and teachers could still envision themselves as part of an interconnected web (Floridi 2016). During the pandemic, the infosphere has become integral to learning and education.

In *Democracy and Education*, originally published in 1916, Dewey declares that communication creates community and that a society exists ‘in transmission, in communication’ (1916/1980: 7, emphasis from the original). Members of a society communicate by drawing on a mutual understanding of things, aims, knowledge, and aspirations. Communication is essential not only for understanding, but it is also educative (Dewey 1916/1980: 7–8).

In his work on information, knowledge, and learning, Dewey dismissed treating the student as a mere recipient and/or repository of information. He argued that even though it is easy ‘to swamp’ the learner with information (1916/1980: 194), the goal should instead be to cultivate students through activities. In the age of easy publication and circulation of online materials, this is more important than ever (Flanigan and Babchuk 2022; Aagaard 2015).

According to Gert Biesta, experience is the central concept in Dewey’s philosophy. Dewey used the idea of experience to establish a theory of education that is neither based on mind nor based on matter, that is, a theory of education that is neither material nor immaterial (Biesta 2010: 38). Dewey contextualises education and learning as matters of political order: education for all creates democracy, whereas knowledge transmission by the learned few suits oligarchy and unequal social orders.

This paper revisits Dewey’s ideals of education for a democratic order and discusses the implications of digital transformation of education for subjectivities and knowledge. According to Waks (2019: 634), Dewey considers that the goal of democratic education should be ‘to foster the democratic personality’ at the level of the individual. Democratic education should be based on a recognition of mutual interests,

and interconnected social groups can adjust themselves to new situations (Dewey 1916/1980: 92). Democracy is ‘a mode of associated living’ (Dewey 1916/1980: 93) that requires communication and practical relevance, and represents what Waks argues is a recognition of shared interests and cooperation (Waks 2019: 634).

Today’s learners rely on the Internet to gain information and knowledge. In fact, the Internet represents an infrastructure in which learners become subject to technologies and processes that shape their sense of self. This also implies that there is a ‘digital gaze’ in which learners see themselves as they imagine others would see them (Floridi 2016: 73). Online conferences and other platforms are examples of the digital gaze in higher education. To examine how technology shapes identities today, it is useful to bring in Foucault’s (1975/1977) analysis of knowledge as a question of power, which is effective when individuals know that they are being observed.

Where Dewey aimed at constructing a viable approach to education in democracy, Foucault brings in a critical supplement. Like Koopman (2009), I consider them as compatible: Foucault is concerned with problems where Dewey is focused on solutions. With Foucault, for example, one may further underline the extent to which digital technologies produce new self-understandings. The use of digital platforms reinforces one’s consciousness about being exposed and observed (Floridi 2016; Harcourt 2015), which is what Foucault highlighted with his analysis of the Panopticon (Foucault 1975/1977).

It has recently been argued that *Democracy and Education* (Dewey 1916/1980) offers a possibility to rethink what the new type of educational technologies can offer to supplement utilitarian job training (Mason 2017: 53). Dewey (1916/1980) develops his critique of the philosophical dualism in the British Empiricist tradition where John Locke distinguished between knowledge and sensorial experiences. Dewey (1916/1980: 165) claims that when knowledge is ‘treated as an end itself’, it becomes a ‘cold-storage ideal’ that is detrimental to education — the student becomes a passive receiver of knowledge and their ‘occasions for thinking go unused’. The established position is a result of modern empiricist philosophy where the subject is viewed as a neutral container and accumulator of knowledge, such as with John Locke’s *tabula rasa* (Locke 1690/1997).

As an alternative, Dewey introduces what has been labelled as a pedagogy based on the principle of ‘learning by doing’ (Dewey 1916/1980: 192; Thuen and Volckmar 2020). Dewey (1916/1980: 66, 192) championed the active learner, constructive habits, and experience-based intelligent abilities. He argued that educational activities as well as ‘information about materials’ and tools should become transferable to activities outside schools (Dewey 1980: 203, 213).

In what follows, I first introduce Dewey’s approach to democracy and education based on a critique of knowledge transmission that creates oligarchy. Second, I outline some of the key concepts in Dewey’s philosophy of teaching — experience, thought, situation, and tools. Third, I introduce Foucault’s analysis of the Panopticon, surveillance, and analytics of power, and discuss how the digital gaze contrasts and compares with Dewey’s ideas about democracy and participation. I conclude by arguing that Dewey’s philosophy offers a possibility to critically scrutinise whether the goals of higher education are consistent with the development of democratic personalities.

Oligarchy and the Undemocratic Dualism

Democracy and Education (Dewey 1916/1980) offers a basis to address relations between information, knowledge, and learning, whilst contextualising education and learning as part of the development of democratic societies. The critique of oligarchy, social and economic inequality, was central to Dewey's approach. His account of democracy is bolstered by a theory of knowledge which is based on viewing education as a question of democracy. Dewey criticised the early Greek philosophers Plato and Aristotle as well as societies based on slavery that undermine equal development for everyone (Dewey 1916/1980: 318). His commitment to equal opportunities and democratic practices in education has had global appeal. It suited the education policies in Scandinavia's social democracies after the Second World War (Thuen and Volckmar 2020). Dewey also inspired educational reforms in Turkey, Holland, and other parts of Europe (Miedema 1996). His teaching at Columbia even influenced the leader of India's outcastes, Bhimrao Ambedkar, before India's independence (Ambedkar 1989: 79).

Dewey develops a systematic philosophical discussion of education in which he criticises the epistemological foundations of modern philosophy, especially the split between mind and the world, culture and nature, and subject and object (Dewey 1916/1980: 174). This epistemological critique is part of his argument for viewing education as part of a democratic society that requires an understanding of how learning processes rely on experiences to raise citizens with intelligent and reflective habits. It is not surprising that Dewey defines democracy in a variety of ways, which prompts Hook to clarify that Dewey's idea was to make the meanings of a desirable and democratic society explicit in the context of education (Hook 1980: xi–xii). Overall, the term democracy is an essentially contested concept (Gallie 1955). For Dewey, however, democracy is more a question of mutual recognition and associated living than a concept about formal political institutions (Dewey 1916/1980, 1938/2008).

Education and democracy are combined in Dewey's philosophy about an inclusive social order. He condemns social exclusion and argues that interaction across social classes would be beneficial to all (Dewey 1916/1980: 327). Dewey's conception of the desirable society is focused on how the individual can grow in association with others by sharing emotions and ideas that create common experiences (Dewey 2015: 20). Education should aim at striking a balance between the individual's growth and the development of the democratic society.

Education requires attention to the societal order and to the type of political constitution that supports the desirable, democratic society. In his discussion of the concept of democracy in education, Dewey (1916/1980: 93) argues that a democratic society 'repudiates the principle of external authority'. One of Dewey's key concerns was the relationship between knowledge and the world, knowledge, and experience. Dewey underlines that the split between knowledge and experience in the Ancient Athenian society reflects a societal order where educated philosophers are projected as people who gain knowledge in radically different ways than many members of the society, such as cobblers, soldiers, and flute players, whose skills are based on experience (Dewey 1916/1980: 272).

Modern philosophy reinforces the split between intellectual and practical studies by suspending experience and disregarding practical skills and techniques in education. Dewey claims that this dualism became more acute with British empiricism because it represented a philosophy where knowledge was based on ‘sensory impressions’ (Dewey 1916/1980: 276). Dewey’s concept of experience involves cognitive inquiry and intellectual growth, which involve an active subject and not a passive receiver of information. He therefore singles out Locke’s philosophy in his critique, whose ‘statements fitted well into the dualism of his day’ (Dewey 1980: 67). Locke’s epistemology (1690/1997) suggests that the human mind is born free of any knowledge as if it is a blank piece of paper that will be filled with content. Dewey argues that the early modern philosophy projected the empty mind as the purest form of thought (Dewey 1916/1980: 277).

The critique of philosophical dualisms is a highly ambitious project. For Dewey, Locke’s *tabula rasa* is an example of an enduring problem in western philosophy — the division between mind and body. This dualism is prominent in Descartes’s philosophy (1641/1998) where his radical doubt about the world involves a split between the inner and the outer world, mind and body. But for Dewey, Locke is the prime focus. He considers Locke to be the most influential empiricist, and he underlines how Locke’s epistemology is based on a ‘sensationalism’ where the mind gains a sense of the material world through impressions and evolving ideas (Dewey 1916/1980: 276–77).

Dewey’s argument is that dualism undermines education in a democratic society. He states that ‘[t]he problem of education in a democratic society is to do away with the dualism and to construct a course of studies which makes thought a guide of free practice for all’ (Dewey 1916/1980: 271). The dualism of mind and matter serves to deny bodily experiences any role in knowledge acquisition, thus representing an impediment for growth. Dewey’s proposition is therefore to circumvent this dualism by appealing to the student’s interest in learning; the student should become an individual committed to growth rather than appealing to rewards outside oneself or offering entertainment (Dewey 1913/1979: 156).

Thinking and Process-Based Learning

In Dewey’s approach, experience is interrelated with thinking through action. Experience and thinking explain how an individual can acquire knowledge and develop one’s abilities. In a later work, Dewey explains that thinking occurs in situations characterised by problems, choices, and ambiguities, or what he refers to as ‘a *forked-road* situation’ (Dewey 1933: 14, emphasis from the original). As such, Dewey creates a new and original basis to make sense of teaching without relying on the mind–body dualism. The idea is to view thinking as an activity in terms of inquiry and questioning in ‘indeterminate’ situations (Hickman and Alexander 1998: 171). It is ‘the method of intelligent experience’ (Dewey 1916/1980: 159).

There are practical implications associated with Dewey’s emphasis on relationships between thinking and learning. He argues, for instance, that it would be

ineffective to simply give new material, toys and practical tools, to children who have not been able to create the tools by themselves and therefore do not know their origins. The point of departure for any schools ‘should be as unscholastic as possible’ in order to give the students something to do rather than something to learn (Dewey 1916/1980: 161). Teaching should therefore provide ‘situations which involve learning by doing’ (Dewey 1916/1980: 192). Scholasticism, however, designates a system that prioritises passive acquisition of readymade knowledge over action and experienced-based thought. The ability to think does not materialise if knowledge is considered in a static manner where information is simply stored and the ‘occasions for thinking go unused’ (Dewey 1916/1980: 165).

In Dewey’s system, thinking is an essential term in relation to which he develops a series of relevant concepts such as inquiry, situation, and habits, each of which should be viewed as process-based concepts (Koopman 2011: 547). Dewey develops a process-based approach to learning where the acquisition of new habits is essential to sustain the learning process and generate growth. Dewey argues that ‘thinking is a process of inquiry’ where the acquisition of knowledge is always secondary to ‘the act of *inquiring*’ (Dewey 1916/1980: 155, emphasis in the original). Thinking is therefore research — finding out — and is triggered in situations that are incomplete, uncertain, and problematic. One may gain the impression that Dewey envisions a situation where students should have the courage to manage uncertainty, but this is not necessarily the case. Instead, Dewey relies on the concept of situation to make immediate experience relevant and avoid formalistic procedures.

Situation is a concept that Dewey brings into discussion of how children imitate and learn through a game or by playing (Dewey 1916/1980: 40–41). For instance, he explains how children learn to play with a ball in a situation where one not only imitates another child who is rolling the ball but also participates to develop the game. The child is part of a social and educational context in which a game is being played. Imitation is a concept of social psychology, but it is secondary to the active participation in the situation where the child tries, actively, to master and improve its role in the game (Dewey 1916/1980: 41).

If situations provide the immediate contexts in which children or students learn through imitation, the goal of education is nonetheless that students should grow. This is where habit becomes a crucial concept. He envisions that education should help students gain new habits and develop their abilities to readjust to new conditions (Dewey 1916/1980: 57).

Reflective thought is an important capability in this regard. He elaborates the idea of habit in a subsequent work where he claims that ‘a good habit of thought’ would amount to the ability to ‘pass judgment *pertinently* and *discriminatingly*’ (Dewey 1933/1998b: 145, emphasis from the original). According to Rømer (2015), this type of reflexivity implies that thinking is not subordinated to action. Rather, various situations represent possibilities to develop experiences that could result in habits that equip the students to cope with both good and bad situations. It would be a disservice to the student to simply please them, because their character will not be trained to confront ‘the real labours of life’ (Dewey 1913/1979: 154). Situations must shape proper habits.

For Dewey, education serves larger aims. He argues that ‘the important thing for education’ is to train ‘the faculties of mind’ until ‘they become thoroughly established habitudes’ (Dewey 1916/1980: 66). Here, the exposure to various types of situations — however challenging — would ensure that students develop constructive habits based on a multitude of experiences.

Dewey addresses social and technological developments as questions in the development of a democratic society overall. He argues, for instance, that technology such as electricity and transportation should serve ‘social ends’ (Dewey 1916/1980: 209, emphasis from the original). He criticises the attempts of private interests to use technologies to make ‘private profit’ (in the way that Facebook and Google do today) and argues that schools need to be in charge of how technologies should serve the common interest (Dewey 1916/1980: 209).

Dewey is acutely aware of how technology from private cooperations may generate differences amongst students and reproduce social inequalities in education. He therefore claims that it is ‘the aim of progressive education to take part in correcting unfair privilege and unfair deprivation, not to perpetuate them’ (Dewey 1916/1980: 126). One of the challenges that Dewey points out is that the education system will reproduce the social status of the students if one ends up selecting individuals for specific sectors before the education process has begun. Such an early selection would be more consistent with an oligarchy than with a democratic society. At the same time, Dewey tends to open up the possibilities for students to play without too many guidelines or ‘recipes and models’ provided by the teacher (Dewey 1916/1980: 177), which may create some vulnerabilities to the reproduction of inequalities.

Democratic Participation or Foucault’s Panopticon?

Teaching and learning in today’s networked society are radically different from the industrial society that characterised Dewey’s period. Developments such as remote teaching, social distancing, personal computers, algorithms, and videoconferencing would have appeared alien to his thinking. Yet Dewey’s set of concepts such as habits, growth, situation, and inquiry are relevant in order to make sense of learning and teaching amidst digital tools and platforms. For example, it is very easy to publish and circulate ‘online content’ (Networked Learning Editorial Collective 2021: 315). This can quickly turn into a tendency to treat the learner as a repository of knowledge, which Dewey found problematic. The Internet and digital technology accelerate communication and easily generate information overload. Yet, for Dewey, communication also has an educative dimension where ‘a recipient of a communication’ can learn and adopt their understandings of another person’s experience (Dewey 1916/1980: 8).

It has been argued that the postdigital society is characterised by the mutual interdependence between the digital and the analogue, the online and the offline (Cramer 2014; Selwyn 2019b). This interrelated understanding of the tangible and the intangible is consistent with Dewey’s thinking. Dewey argued that tangible tools (like hammers or computers) and intangible tools (like habits, language, or shared ideas) are mutually adapted (Hickman 2001: 46).

However, the transformations in a postdigital society need to be addressed at both the individual and the societal level. One implication at the individual level is that the Internet has become integral to memory and cognition (Ward 2013). The Internet transforms the ways in which the human mind changes with new material conditions (Falikman 2021). As Säljö (2010: 61) argues, the contemporary situation involves ‘externalised cognition’ where algorithms and software for storekeeping have become part of learning processes.

The externalisation of memory and knowledge reflects dependency on digital tools for studying. Falikman (2021) argues that the borders between the person’s cognitive system and technical devices are blurred, and claims that it is difficult to demarcate the difference between one’s memory and the Internet. However, digital tools have become a basic method to process the considerable amount of available data, information, and knowledge. This requires that habits and methods are adjusted to the postdigital situation. *Habit* is a key term because the acquisition of knowledge may be undermined by digital tools that also create a culture of distraction (Aagaard 2015).

The societal level is decisive for understanding the extent to which factors external to higher education are changing faster than its own practices. It is noteworthy that digital technology belongs to a dynamic form of capitalism. Whilst data and algorithms inform students and researchers in their everyday work, they are also essential to generating profits in this new business model. Zuboff offers the most compelling account of the emerging form of capitalism in her book *Surveillance Capitalism* (2019). Muldoon (2022: 24) criticises Zuboff’s work for failing to understand the relevance of extractive business models for both industrial and digital capitalism. However, Zuboff’s (2019) argument is nonetheless compelling: companies earn money by collecting data from their users whilst employing that data to modify their behaviour.

Capitalism has always been extractive in the past, yet the embeddedness of technology in educational activities is a new development. Students and scholars are aware that they are being observed in new ways. For instance, online conferences reinvented the class community in the context of social distancing, created new spaces for learning, and made them visible (Wardak et al. 2022). The technology has intensified the demands on every participant’s attention, transformed relations between students, and challenged the distinction between public and private. Students were able to view each other in their private homes as well as view the whole class as a community.

There are constructive and more problematical dimensions of video conference technology. On the one hand, video conferencing can be used to extend and advance cooperation. It can enable students to communicate and grow in the sense that Dewey (1916/1980) imagined active participation. On the other hand, video conferences clearly augment the relevance of the ‘digital gaze’, the sense of seeing oneself as observed by others (Floridi 2016: 73).

As a specific form of the digital gaze, video conferences reinvent the effect of visibility that Foucault highlights in his study of the Panopticon — the prison system where inmates were observed by a minimal number of staff (Foucault 1975/1977). Foucault argues that the Panopticon was an architectural experiment

and a system of power that created particular subject-positions amongst the inmates (Foucault 1975/1977: 204–205). Accordingly, video conferencing creates subject-positions for the participants. Unlike inmates in the Panopticon, students can switch off cameras to avoid being observed. Whilst this represents a form of resistance, it also puts cooperation and the incentive to learn into question.

Foucault's model of the Panopticon does not quite correspond to the many pressing questions concerning teaching during the Covid-19 crisis, during which teachers had to radically change their methods of instruction. Systematic examinations of teachers' agency and skills in 'digital' methods have documented very different experiences amongst teachers (Damşa et al. 2021). One may even suggest that video conference technology have made the teacher's performance and ability to adapt even more decisive. This would invert Foucault's (1975/1977) Panopticon: rather than the inmates being observed in Foucault's prison, video conferencing could reinforce the focus on the teacher, whose skills and performance gained primacy over learning.

The increasing amount of data, careful tracking, and methods of observation make the digital gaze an important element of postdigital education. Foucault's Panopticon serves as a powerful conceptual tool to make sense of this development, although there are limitations to Foucauldian approaches to how power creates self-regulating practices (Selwyn 2019b: 38). Yet Foucault also developed alternative approaches. For example, Socrates' dialogues and the concept of *parrhêsia* ('free-spokenness') that Foucault analysed (Leask 2012) offer some promise and may serve to reconceptualise educational practices (Brady 2022).

Even though Foucault's use of Socrates' dialogues provides a model of an individual committed to truth (Foucault 2011), it cannot become the only idea of education as a basis for the democratic society. At this point, it is useful to bring into focus that Foucault combines his interest in explaining how one is governed (2002: 335–337) with an interest in truth and the Enlightenment. His penetrating comments on Immanuel Kant's reflections on the meanings of the Enlightenment (Foucault 1991) are an important supplement in current discussions of democracy and education.

Seeing the concept of *parrhêsia* in combination with Foucault's discussion of Kant and the Enlightenment offers a constructive idea of the subject as an active participant who is committed to truth. Foucault's (1991: 42) suggestion was that Kant offers a possibility to engage with contemporary historical conditions. Yet, despite his appreciation for Kant's critical engagement with the present, Foucault (1991: 42) does not highlight 'faithfulness to doctrinal elements' in a manner that one could expect from a more straightforward democratic thinker. Instead, he wants to supplement the more well-known analytics of power with a reactivation of critical reflexivity without being pigeonholed in conventional categories of rationalism or irrationalism that are often associated with the Enlightenment (Foucault 1991: 43).

The controversy surrounding Foucault and norms is well known, but the comparison of Foucault and Dewey is useful to develop a constructive discussion of democracy and subjectivity. They both broadly identify with philosophical commitment associated with the French Enlightenment (Dewey 1925/1998a: 12; Foucault 1991). Dewey

more expressly refers to the principles of freedom, equality, and fraternity, although this is comparatively moderate and often in the context of his experience-based approach. Indeed, he argues that these principles cannot remain ‘hopeless abstractions’ unless each is incorporated into social and political practices (Dewey 1927/2016: 176).

This applies to education, where students are better prepared for citizenship through discussions and sharing of findings and experiences rather than ‘the lessons learned from teachers and books’ (Dewey 1973: 322). Although Dewey’s pragmatism implies that moral commitments are ‘immanent standards’ (Midtgarden 2012: 506), his philosophy of education also aims to cultivate students as democratic citizens. His concern with democratic commitments and citizenship may supplement Biesta’s (2020: 101) concept of socialisation as a call for individuality and the assured cultivation of freedom.

In his comparison of Dewey and Foucault, Koopman (2009: 215) argued that the two thinkers provide a productive contrast: where Foucault practices ‘critique as an act of problematisation’, Dewey aims at ‘problem-solving activity’. Yet Foucault’s scholarship takes in more than his radical account of the historical contingency of knowledge and its constitution through power. Foucault’s commitment to truth struggles and his critical engagement with the present includes an ethical commitment, even though Foucault did not spell out that commitment systematically in the same way as Dewey, Ambedkar, Habermas, and Rawls. Foucault’s critique is also particularly fitting for an analysis of algorithms and digital forms of behaviour modification as types of knowledge imposed from above.

Discussion

The *postdigital* designates a situation in which technology cannot simply be turned on or off. As Taffel states (2016: 329), the digital has become as essential for human practices as water and air. On the one hand, the postdigital designates a pragmatic understanding of how one is embedded in an unstable situation where the digital and the analogue cannot be separated (Jandrić et al. 2018). On the other hand, it confirms a certain exhaustion and disillusionment about the ever-new technological innovations (Selwyn 2019b: 24). This paper adds to the debate about the future directions of education in a postdigital society.

Dewey (1927/2016: 176) argued that a community that starts with experiences and educates its members would create a realistic democracy. Likewise, digital tools for cooperation in higher education often enable the possibility to cooperate and to create communities around educational activities. For example, Burbules (2015) argues that online teaching offers a possibility to rethink what one takes for granted in a regular classroom, suggesting, for example, that it becomes an incentive to adopt more attentive forms of listening rather than conducting long lectures. Furthermore, it has been found that students with autism spectrum disorders can gain independence, reduce stress, and improve their social opportunities, by using technology in different supportive ways (Hedges et al. 2018: 77). Finally, others have found that cooperation in video conferences has become part of a broader set

of tools (or actants) as students coordinate activities and available sources in their learning environment (Sobko et al. 2020).

Even though Dewey's philosophy provides some ideas about goals and directions of education, the current transformation and disillusionment can be characterised by accelerated change (Eriksen 2014), surveillance capitalism (Zuboff 2019), and segregated communities (Vaidhyathan 2017). The conditions for democratic cooperation in education appear to be under challenge. Additionally, the relationships between information and knowledge are changing. Videoconferencing technology is one example of how the digital gaze is shaping today's subjectivity. Foucault's analyses delineate some relevant challenges for subjectivity in education. They also explain that methodological distractions resulting from electronic technology are consistent with power to an extent that goes beyond Dewey's conceptual repertoire. Dewey's philosophy does not include the problematisation of the governing of subjects that would be necessary today.

According to Dewey, education is the 'only' solution for developing a democracy characterised by mutual understandings and recognition (Dewey 1916/1980: 92–93). Consequently, he condemns systems of stratification, racism, and other exclusionary practices (Dewey 1916/1980: 93). Mårdh and Tryggvason are amongst those who criticise Dewey on this point; they rightly state that he did not address political antagonisms and 'the antagonistic other' (Mårdh and Tryggvason 2017: 604).

Subjectivities are produced by rationalities and technological frameworks outside educational institutions (Ball and Olmedo 2013: 88). Foucauldian analyses delineate how new subjectivities are produced by technologies and, importantly, underline how technologies may undermine and change the goals of education. A 'postdigital sensibility' and an understanding of the social costs of using available digital technologies are needed (Knox 2019: 366).

The development of constructive habits requires a process in which the student could learn through action. As I have emphasised, one of Dewey's central ideas was that the student could not simply be a passive receiver of knowledge. Constructive habits will instead emerge through inquiries, discipline (1916/1980: 136), and when the student has been facing open-ended situations which represent incentives to think. Viewed as essential to learning, Dewey's concept of situation ('a *fork-road* situation') is a useful reminder of the need to prioritise thought processes rather than, for instance, mechanical application of technology.

If digital technologies tend to individualise and distract students, they are not necessarily compatible with the cultivation of growth and engagement with learning and truth. This situation requires a Foucauldian analysis wherein the individual is made visible and their subject-position is produced. On its own, Foucault's concept of the Panopticon might appear stale (Selwyn 2019b: 38). In response to Selwyn, I have supplemented the concept of subject-position with Foucault's later interest in truth-struggles (Foucault 2011) and his overall commitment to the Enlightenment as a critical project (Foucault 1991). Whilst following up earlier attempts at comparing Foucault and Dewey (Koopman 2009), I emphasise how Foucault's analysis of subject-positions provides a basis to underscore the challenges of a panoptic post-digital society.

This perspective reinforces a sensibility about the disciplinary and dystopian possibilities in a postdigital society in ways that Dewey's philosophy does not offer. However, the ethical potentials and commitment to truth arising from the comparison of Dewey and Foucault also broadly involve ideas associated with the Enlightenment. Arguably, this comparison could reinforce the concern with contingent truth and ongoing scrutiny of goals in educational practices today.

Conclusion

The aim of this article has been to outline a critical approach to democracy and subjectivity in higher education at a time when digital tools and conference technology have transformed social relations, behaviour, and learning processes. This task is important because higher education is surrounded by powerful discourses such as technological solutionism or dystopic views of surveillance capitalism. Governments tend to be open for the former, technological solutionism; their digital agendas reinforce a linear understanding of electronic technology as a solution to several societal challenges. The Covid-19 crisis also reinforced the idea of technological 'solutionism'. Digital platforms became the basis for communication when the educational institutions moved to online teaching and video conferences to practice social distancing (Teräs et al. 2020). This has at any rate confirmed the potential messiness and unpredictability of the postdigital situation (Jandrić et al. 2018, 2022); it has shown how habits and skills can change understandings of learning and education.

These changes occur within a particularly dynamic form of capitalism. Technology is disruptive overall, and the electronic solutions from Silicon Valley will accelerate change (Eriksen 2014; Selwyn 2019a; Teräs et al. 2020). There are corporate incentives for technological renewal in this capitalist model (Srnicke 2017: 12). Following up on Selwyn's statement that there is 'much to be gained by looking back at Dewey in more detail' (Selwyn and Jandrić 2020: 999), this paper has systematically examined Dewey's views with a specific focus on democracy and subjectivity in a postdigital context.

Dewey claimed that 'the important thing for education' is to train 'the faculties of mind' until 'they become thoroughly established habitudes' (Dewey 1916/1980: 66). However, the development of these constructive habits requires that the student has been exposed to many different experiences. It is against such a general background that one may suggest that Dewey's response to the proliferation of digital tools would be to contextualise them in a larger, well-planned process. This increases the role of the teachers, their agency, and the institutional platforms (Damşa et al. 2021). It would be consistent with Dewey's ideas to flip the classroom and to use the time in class for interaction and activities rather than organising a teacher-centred environment. Experienced teachers would therefore be in a position to publish their own educational materials — a video or a podcast — prior to the class in order to make time for activities in class (King 2021).

'Active connections' amongst students and interaction would give them the possibility to reflect on their own experiences, and to understand those of other students

(Dewey 1916/1980: 194). As such, social relations and communication are central to gaining experiences as a learner and as a democratic citizen with a sense of the common good. Understandings of information, knowledge, and truth matter for the future of democracy and emerging subjectivities. I suggest, however, that there is scope beyond Dewey and Foucault to further articulate how the principles of liberty, equality, and mutual recognition would also strengthen growth and democratic reflexivity in a postdigital society.

Acknowledgements The paper has benefited from comments by Torjus Midtgarden, whose expertise on Dewey's philosophy has been valuable throughout the writing process. I would also like to thank Petar Jandrić and the anonymous reviewers for their constructive comments on this paper, as well as Han Peng Ho, Hege Hermansen, Mona Joksche Berg, Trond Are Johnsen, and Adam King for the comments and assistance. I remain responsible for the article, its content, and any shortcomings.

Funding Open access funding provided by Molde University College - Specialized University in Logistics.

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References

- Aagaard, J. (2015). Drawn to Distraction: A Qualitative Study of Off-Task Use of Educational Technology. *Computers & Education*, 87, 90–97. <https://doi.org/10.1016/j.compedu.2015.03.010>.
- Ambedkar, B. R. (1989). Annihilation of Caste. In V. Moon (Ed.), *Vol. 1, Dr. Babasaheb Ambedkar Writings and Speeches* (pp. 23–96). Bombay: Education Department, Government of Maharashtra.
- Ball, S. J., & Olmedo, A. (2013). Care of the Self, Resistance and Subjectivity under Neoliberal Governmentalities. *Critical Studies in Education*, 54(1), 85–96. <https://doi.org/10.1080/17508487.2013.740678>.
- Biesta, G. (2005). Against Learning. Reclaiming a Language for Education in an Age of Learning. *Nordic Studies in Education*, 25(1), 54–66. <https://doi.org/10.18261/ISSN1891-5949-2005-01-06>.
- Biesta, G. (2010). *Good Education in an Age of Measurement: Ethics, Politics, Democracy. Interventions: Education, Philosophy & Culture*. Boulder, CO, and London, UK: Paradigm Publishers.
- Biesta, G. (2020). Risking Ourselves in Education: Qualification, Socialization, and Subjectification Revisited. *Educational Theory*, 70(1), 89–104. <https://doi.org/10.1111/edth.12411>.
- Brady, A. M. (2022). Accounting for Oneself in Teaching: Trust, Parrhesia, and Bad Faith. *Studies in Philosophy and Education*, 41(3), 273–286. <https://doi.org/10.1007/s11217-022-09824-w>.
- Burbules, N. (2015). Listening and Teaching in Online Contexts. In L. J. Waks (Ed.), *Listening to Teach: Beyond Didactic Pedagogy* (pp. 183–193). Albany, NY: Albany: State University of New York Press.
- Cramer, F. (2014). What is 'Post-digital'? *APRJA*, 3(1), 10–24. <https://doi.org/10.7146/aprja.v3i1.116068>.
- Damşa, C., Langford, M., Uehara, D., & Scherer, R. (2021). Teachers' Agency and Online Education in Times of Crisis. *Computers in Human Behavior*, 121, 106793. <https://doi.org/10.1016/j.chb.2021.106793>.
- Descartes, R., (1998). *Discourse on method and: Meditations on first philosophy* (4th ed.). Indianapolis: Hackett Pub (Original work published 1637; 1641).
- Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process*. Chicago, IL: Henry Regnery Company.
- Dewey, J. (1973). *Lectures in China, 1919–1920. An East-West Center book*. Honolulu, HI: University Press of Hawaii.

- Dewey, J. (1979). Interest and Effort in Education. In J. Dewey, *The Middle Works, 1899–1924: Volume 7* (pp. 153–198). Carbondale, IL: Southern Illinois University Press. (Original work published 1913).
- Dewey, J. (1980). Democracy and Education. In J. Dewey, *The Middle Works 1899–1924: Volume 9* (pp. 1–370). Carbondale, IL: Southern Illinois University Press. (Original work published 1916).
- Dewey, J. (1998a). The Development of American Pragmatism. In L. A. Hickman & T. M. Alexander (Eds.), *The Essential Dewey. Volume 1: Pragmatism, Education, Democracy* (pp. 3–13). Bloomington, IN: Indiana University Press. (Original work published 1925).
- Dewey, J. (1998b). The Place of Judgment in Reflective Activity. In L. A. Hickman & T. M. Alexander (Eds.), *The Essential Dewey. Volume 2: Ethics, Logics, Psychology* (pp. 145–156). Bloomington, IN: Indiana University Press. (Original work published 1933).
- Dewey, J. (2008). Democracy and Education in the World of Today. In J. Dewey & J. A. Boydston (Eds.), *The Collected Works of John Dewey. The Later Works, 1925–1953. Vol. 13, 1938–1939* (pp. 294–303). Carbondale, IL: Southern Illinois University Press. (Original work published 1938).
- Dewey, J. (2015). Lectures in Social and Political Philosophy. *European Journal of Pragmatism and American Philosophy*, VII(2). <https://doi.org/10.4000/ejppap.404>.
- Dewey, J. (2016). *The Public and its Problems: An Essay in Political Inquiry*. Athens, OH: Swallow Press. (Original work published 1927).
- Eriksen, T. H. (2014). *Globalization: The Key Concepts*. 2nd Ed. London: Bloomsbury Academic.
- Falikman, M. (2021). There and Back Again: A (Reversed) Vygotskian Perspective on Digital Socialization. *Frontiers in Psychology*, 12, 501233. <https://doi.org/10.3389/fpsyg.2021.501233>.
- Flanigan, A. E., & Babchuk, W. A. (2022). Digital Distraction in the Classroom: Exploring Instructor Perceptions and Reactions. *Teaching in Higher Education*, 27(3), 352–370. <https://doi.org/10.1080/13562517.2020.1724937>.
- Floridi, L. (2016). *The 4th Revolution: How the Infosphere is Reshaping Human Reality*. Oxford: Oxford University Press.
- Ford, D. R., & Jandrić, P. (2021). Postdigital Marxism and Education. *Educational Philosophy and Theory*. <https://doi.org/10.1080/00131857.2021.1930530>.
- Foucault, M. (1977). *Discipline and Punish: The Birth of the Prison*. London: Penguin. (Original work published 1975)
- Foucault, M. (1991). What is Enlightenment? In P. Rabinow (Ed.), *The Foucault Reader. An Introduction to Foucault's Thought* (pp. 32–50). London: Penguin.
- Foucault, M. (2002). Subject and Power. In J. D. Faubion (Ed.), *Essential Works of Foucault 1954–1984. Power* (pp. 326–348). London: Penguin.
- Foucault, M. (2011). *The Courage of Truth: The Government of Self and Others II: Lectures at the Collège de France, 1983–1984*. Basingstoke: Palgrave Macmillan.
- Gallie, W. B. (1955). Essentially Contested Concepts. *Proceedings of the Aristotelian Society*, 56, 167–198.
- Harcourt, B. E. (2015). *Exposed: Desire and Disobedience in the Digital Age*. Cambridge, MA: Harvard University Press.
- Hedges, S. H., Odom, S. L., Hume, K., & Sam, A. (2018). Technology Use as a Support Tool by Secondary Students with Autism. *Autism*, 22(1), 70–79. <https://doi.org/10.1177/1362361317717976>.
- Hickman, L. A. (2001). *Philosophical Tools for Technological Culture: Putting Pragmatism to Work*. Bloomington, IN: Indiana University Press.
- Hickman, L. A., & Alexander, T. M. (Eds.) (1998). *The Essential Dewey. Volume 2: Ethics, Logics, Psychology*. Bloomington, IN: Indiana University Press.
- Hook, S. (1980). Introduction. In J. Dewey, *Middle works 1899–1924: Volume 9* (pp. ix–xxiv). Carbondale, IL: Southern Illinois University Press.
- Jandrić, P., Fuentes Martinez, A., Reitz, C., Jackson, L., Grauslund, D., Hayes, D., Lukoko, H. O., Hogan, M., Mozelius, P., Arantes, J. A., Levinson, P., Ozoliņš, J., Kirylo, J. D., Carr, P. R., Hood, N., Tesar, M., Sturm, S., Abegglen, S., Burns, T., Sinfield, S., Stewart, G. T., Suoranta, J., Jaldemark, J., Gustafsson, U., Monzó, L. D., Batarelo Kokić, I., Kihwele, J. E., Wright, J., Kishore, P., Stewart, P. A., Bridges, S. M., Lodahl, M., Bryant, P., Kaur, K., Hollings, S., Brown, J. B., Stekete, A., Prinsloo, P., Hazzan, M. K., Jopling, S., Gibbons, A., Pfohl, S., Humble, N., Davidsen, J., Ford, D. R., Sharma, N., Stockbridge, K., Pyyhtinen, O., Escaño, C., Achieng-Evensen, C., Rose, J., Irwin, J., Shukla, R., SooHoo, S., Truelove, I., Buchanan, R., Urvashi, S., White, E. J., Novak, R., Ryberg, T., Arndt, S., Redder, B., Mukherjee, M., Komolafe, B. F., Mallya, M., Devine, N., Sattarzadeh, S. D., & Hayes, S. (2022). Teaching in the Age of Covid-19—The New Normal. *Postdigital Science and Education*, 4(3), 877–1015. <https://doi.org/10.1007/s42438-022-00332-1>.

- Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital Science and Education. *Educational Philosophy and Theory*, 50(10), 893–899. <https://doi.org/10.1080/00131857.2018.1454000>.
- King, G. (2021). Flipping My Research Methods Course: Video Lectures, OERs & the Hybrid Classroom. aapsaEDUCATE, 28 May. <https://educate.apsanet.org/flipping-my-research-methods-course-video-lectures-oers-the-hybrid-classroom>. Accessed 8 July 2023.
- Klinge, T. J., Hendrikse, R., Fernandez, R., & Adriaans, I. (2022). Augmenting Digital Monopolies: A Corporate Financialization Perspective on the Rise of Big Tech. *Competition & Change*, 10245294221105573. <https://doi.org/10.1177/10245294221105573>.
- Knox, J. (2019). What Does the ‘Postdigital’ Mean for Education? Three Critical Perspectives on the Digital, with Implications for Educational Research and Practice. *Postdigital Science and Education*, 1(2), 357–370. <https://doi.org/10.1007/s42438-019-00045-y>.
- Koopman, C. (2009). *Pragmatism as Transition. Historicity and Hope in James, Dewey, and Rorty*. New York: Columbia University Press.
- Koopman, C. (2011). Genealogical Pragmatism: How History Matters for Foucault and Dewey. *Journal of the Philosophy of History*, 5(3), 533–561. <https://doi.org/10.1163/187226311X599943>.
- Leask, I. A. N. (2012). Beyond Subjection: Notes on the Later Foucault and Education. *Educational Philosophy and Theory*, 44(s1). <https://doi.org/10.1111/j.1469-5812.2011.00774.x>.
- Locke, J. (1997). *An essay concerning human understanding*. London: Penguin Books. (Original work published 1690).
- Mårth, A., & Tryggvason, Á. (2017). Democratic Education in the Mode of Populism. *Studies in Philosophy and Education*, 36(6), 601–613. <https://doi.org/10.1007/s11217-017-9564-5>.
- Mason, L. E. (2017). The Significance of Dewey’s *Democracy and Education* for 21st-Century Education. *Education and Culture*, 33(1), 41–57. <https://doi.org/10.5703/educationculture.33.1.0041>.
- Midtgarden, T. (2012). Critical Pragmatism: Dewey’s Social Philosophy Revisited. *European Journal of Social Theory*, 15(4), 505–521. <https://doi.org/10.1177/1368431011432373>.
- Miedema, S. (1996). Dewey in Europe: A Case Study on the International Dimensions of the Turn-of-the-Century Educational Reform. *American Journal of Education*, 105(1), 1–26. <https://doi.org/10.1086/444142>.
- Muldoon, J. (2022). *Platform Socialism: How to Reclaim our Digital Future from Big Tech*. London: Pluto Press.
- Networked Learning Editorial Collective (2021). Networked Learning: Inviting Redefinition *Postdigital Science and Education*, 3(2), 312–325. <https://doi.org/10.1007/s42438-020-00167-8>.
- Rømer, T. A. (2015). Thought and Action in Education. *Educational Philosophy and Theory*, 47(3), 260–275. <https://doi.org/10.1080/00131857.2013.860368>.
- Säljö, R. (2010). Digital tools and challenges to institutional traditions of learning: Technologies, social memory and the performative nature of learning. *Journal of Computer Assisted Learning*, 26(1), 53–64. <https://doi.org/10.1111/j.1365-2729.2009.00341.x>.
- Selwyn, N. (2019a). *Should Robots Replace Teachers? AI and the Future of Education*. Cambridge, UK: Polity Press.
- Selwyn, N. (2019b). *What is Digital Sociology? What is Sociology?* Cambridge, UK, & Medford, MA: Polity Press.
- Selwyn, N., & Jandrić, P. (2020). Postdigital Living in the Age of Covid-19: Unsettling What We See as Possible. *Postdigital Science and Education*, 2(3), 989–1005. <https://doi.org/10.1007/s42438-020-00166-9>.
- Sobko, S., Unadkat, D., Adams, J., & Hull, G. (2020). Learning Through Collaboration: A Networked Approach to Online Pedagogy. *E-Learning and Digital Media*, 17(1), 36–55. <https://doi.org/10.1177/2042753019882562>.
- Srniecek, N. (2017). The Challenges of Platform Capitalism: Understanding the Logic of a New Business Model. *Juncture*, 23(4). <https://doi.org/10.1111/newe.12023>.
- Taffel, S. (2016). Perspectives on the Postdigital: Beyond Rhetorics of Progress and Novelty. *Convergence*, 22(3), 324–338. <https://doi.org/10.1177/1354856514567827>.
- Taglietti, D., Landri, P., & Grimaldi, E. (2021). The Big Acceleration in Digital Education in Italy: The COVID-19 Pandemic and the Blended-School Form. *European Educational Research Journal*, 20(4), 423–441. <https://doi.org/10.1177/14749041211021246>.
- Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (2020). Post-Covid-19 Education and Education Technology ‘Solutionism’: A Seller’s Market. *Postdigital Science and Education*, 2(3), 863–878. <https://doi.org/10.1007/s42438-020-00164-x>.

- Thuen, H., & Volckmar, N. (2020). Postwar School Reforms in Norway. In H. Thuen & N. Volckmar (Eds.), *Oxford Research Encyclopedia of Education*. Oxford: Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1456>.
- Tschaepé, M. (2020). Seeing and Viewing Through a Postdigital Pandemic: Shifting from Physical Proximity to Scopic Mediation. *Postdigital Science and Education*, 2(3), 757–771. <https://doi.org/10.1007/s42438-020-00156-x>.
- Vaidhyathan, S. (2017). Facebook Wins, Democracy Loses. *New York Times*, 8 September. <https://www.nytimes.com/2017/09/08/opinion/facebook-wins-democracy-loses.html>. Accessed 8 July 2023.
- Waks, L. J. (2019). Democratic Self-Cultivation. *Beijing International Review of Education*, 1(4), 626–644. <https://doi.org/10.1163/25902539-00104004>.
- Ward, A. F. (2013). Supernormal: How the Internet Is Changing Our Memories and Our Minds. *Psychological Inquiry*, 24(4), 341–348. <https://doi.org/10.1080/1047840X.2013.850148>.
- Wardak, D., Vallis, C., & Bryant, P. (2022). #OurPlace2020: Blurring Boundaries of Learning Spaces. *Postdigital Science and Education*, 4(1), 116–137. <https://doi.org/10.1007/s42438-021-00264-2>.
- Watermeyer, R., Shankar, K., Crick, T., Knight, C., McGaughey, F., Hardman, J., Suri, V. R., Chung, R., & Phelan, D. (2021). ‘Pandemia’: A Reckoning of UK universities’ Corporate Response to COVID-19 and its Academic Fallout. *British Journal of Sociology of Education*, 42(5-6), 651–666. <https://doi.org/10.1080/01425692.2021.1937058>.
- Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.
- Zuboff, S. (2022). Surveillance Capitalism or Democracy? The Death Match of Institutional Orders and the Politics of Knowledge in Our Information Civilization. *Organization Theory*, 3(3), 26317877221129290. <https://doi.org/10.1177/26317877221129290>.

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