### **ORIGINAL PAPER**



# Huxleyan utopia or Huxleyan dystopia? "Scientific humanism", Faure's legacy and the ascendancy of neuroliberalism in education

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### **Abstract**

In addition to the longstanding threat posed by narrow economism, faith in the possibility of peace and progress through democratic politics – central to the humanistic vision of the 1972 Faure report - today faces additional challenges. These challenges include the ascendancy of neurocentrism in the global policyscape. Whereas the effects of neoliberalism on education have been extensively critiqued, the implications of a newer, related ideological framework known as neuroliberalism remain under-theorised. Neuroliberalism combines neoliberal ideas concerning the role of markets in addressing social problems with beliefs about human nature ostensibly grounded in the behavioural, psychological and neurological sciences. This article critically examines a recent initiative of one of UNESCO's Category 1 Institutes – the Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) – that seeks to mainstream neuroscience and digital technology within global educational policy. Comparing the visions of the 1972 Faure, the 1996 Delors and the 2021 Futures of Education reports with MGIEP's International Science and Evidence Based Education Assessment (ISEEA), the authors analyse continuity and change in UNESCO's attempts to articulate a vision of "scientific humanism" which advocates the use of science for the betterment of humanity. They argue that ISEEA's overall recommendations – as represented in its Summary for Decision Makers (SDM) - reinforce a reductive, depoliticised vision of education which threatens to exacerbate educational inequality while enhancing the profits and power of Big Tech. These recommendations exemplify a neuroliberal turn in global education policy discourse, marking a stark departure from the central focus on ethics and democratic politics characteristic of UNESCO's landmark education reports. Reanimating, in cruder form, visions of a scientifically-organised utopia of the kind that attracted UNESCO's inaugural Director-General, Julian Huxley, ISEEA's recommendations actually point towards the sort of dystopian "brave new world" of which his brother, Aldous Huxley, warned.





**Keywords** UNESCO · Faure report · Scientific humanism · SDG Target 4.7 · Neuroscience · International Science and Evidence Based Education Assessment (ISEEA) · Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) · Personalised learning · Precision education governance

#### Résumé

Utopie huxleyenne ou dystopie huxleyenne? « L'humanisme scientifique », l'héritage de Faure et la montée du néolibéralisme dans l'éducation - Outre faire face à la menace que pose depuis longtemps l'économisme étroit, la foi dans la possibilité que la politique démocratique peut produire paix et progrès – un pilier de la vision humaniste du rapport Faure paru en 1972 – se heurte aujourd'hui à d'autres défis, entre autres à la montée du neurocentrisme dans le champ politique mondial. Tandis que les effets du néolibéralisme sur l'éducation ont été abondamment critiqués, peu d'hypothèses ont été formulées au sujet de ce qu'implique une notion plus récente, mais liée à lui sur le plan idéologique et connue sous le nom de neurolibéralisme. Le neurolibéralisme associe des idées néolibérales sur le rôle des marchés pour résoudre des problèmes sociaux avec la conviction que la nature humaine est prétendument ancrée dans les sciences comportementales, psychologiques et neurologiques. Cet article porte un regard critique sur une initiative récente d'un des instituts de catégorie 1 de l'UNESCO, l'Institut Mahatma Gandhi d'éducation pour la paix et le développement durable (MGIEP), qui cherche à intégrer les neurosciences et la technologie du numérique dans la politique mondiale de l'éducation. Les auteurs comparent les visions des rapports Faure en 1972 et Delors en 1996 et du rapport de 2021 sur les futurs de l'éducation avec l'évaluation internationale de l'éducation basée sur la science et des éléments concrets (ISEEA) réalisée par le MGIEP, pour analyser la continuité et les changements dans les tentatives de l'UNESCO d'articuler une vision de « l'humanisme scientifique » prônant d'utiliser la science pour améliorer l'humanité. Ils avancent que les recommandations principales de l'ISEEA, telles que l'évaluation les présente dans son récapitulatif à l'intention des décideurs, renforce une vision réductrice et dépolitisée de l'éducation, qui menace d'exacerber les inégalités en matière d'éducation tout en accroissant les profits et la puissance des big tech. Ces recommandations illustrent un tournant neurolibéral dans le discours mondial sur la politique de l'éducation, qui se démarque absolument de l'intérêt central pour l'éthique et la politique démocratique, caractéristiques des rapports historiques de l'UNESCO sur l'éducation. Ravivant, sous une forme plus rudimentaire, des visions d'une utopie structurée scientifiquement du type de celles qui attiraient le premier directeur général de l'UNESCO, Julian Huxley, les recommandations de l'ISEEA laissent en réalité entrevoir la sorte de « meilleur des mondes » dystopique contre laquelle son frère, Aldous Huxley, mettait en garde.

### Introduction

Over the past 50 years, the United Nations Educational, Scientific and Cultural Organization (UNESCO) has released three seminal reports on education expressing faith in the possibility of peace and progress through democratic politics: *Learning to be:* 



The world of education today and tomorrow (Faure et al. 1972); Learning: The treasure within (Delors et al. 1996); and Reimagining our futures together: A new social contract for education (ICFE 2021). The appearance of these reports has followed, respectively, the political turbulence of the late 1960s, the end of the Cold War, and, most recently, the promulgation of the United Nations' Sustainable Development Goals (SDGs) (UN 2015). However, the humanistic principles that these landmark reports espouse seem increasingly embattled as the 21st century progresses. The enduring hegemony of neoliberalism as a "world-making project" which has profoundly shaped the landscape of global economic and educational governance remains a major ongoing challenge to humanism (Bell 2013, p. 267).

Whereas the effects of neoliberalism on education have been extensively critiqued, the implications of a newer, related ideological framework known as neuroliberalism remain under-theorised. Neuroliberalism combines neoliberal ideas concerning the role of markets in addressing social problems with beliefs about human nature ostensibly grounded in the behavioural, psychological and neurological sciences (Whitehead et al. 2018). In what follows, we focus on an aspect of neuroliberalism referred to as "brainhood ... the quality or condition of being a brain" (Vidal 2009, p. 5), and associated calls to reimagine and transform education based on the "learning sciences", especially neuroscience (OECD 2002, 2007; Chatterjee Singh and Durajappah 2020). The Organisation for Economic Co-operation and Development (OECD), for example, has recently declared "brain skills and brain health" an "indispensable part of the knowledge economy", invoking "brain capital" alongside "human capital" (OECD n.d.; also see Smith et al. 2021). Despite this growing focus on "brainhood" in the global policyscape (e.g. World Bank 2015; UN Innovation Network 2021; OECD n.d.), critical scholarship on the implications of invoking neuroscience as a basis for educational policymaking remains relatively scant, especially with respect to policies in the area of "education for sustainable development" (UN 2015).

This article seeks to address this gap in the literature by critically exploring UNESCO's own recent embrace of neuroscience as a basis for "transforming education" for peace and sustainability, with particular reference to the efforts of the Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) to "transform education for humanity" (MGIEP 2020, p. 1), and to "build kinder brains" (MGIEP 2022). MGIEP is a UNESCO Category 1 Institute<sup>2</sup> established in 2012 in New Delhi and the only UNESCO institute devoted to SDG Target 4.7 (on Education for Sustainable Development and Global Citizenship Education; UN 2015). Analysing continuity and change in UNESCO's attempts to articulate a "scientific humanism", we compare the visions of the 1972 Faure, the 1996 Delors and the 2021 Futures of Education reports with MGIEP's International Science and Evidence Based Education Assessment (ISEEA), launched by

<sup>&</sup>lt;sup>2</sup> There are seven Category 1 Institutes under UNESCO's Education Sector. MGIEP is the newest one and the only one located in the Asia-Pacific region. For a detailed overview of the establishment of MGIEP, see Vickers (2022).



<sup>&</sup>lt;sup>1</sup> The recent ascendency in anglophone educational research of decolonial approaches also poses challenges for the universalist humanism of UNESCO's founding vision. The Faure Report has recently been portrayed as "Learning to Be as Western Enlightenment Man" (Rappleye and Komatsu 2022, p. 8). Decolonial critiques of Faure, and of UNESCO more generally, demand serious consideration, but this task lies beyond the scope of this article (for engagement with related arguments, see Vickers 2020).

the Institute in 2019 as a contribution to UNESCO's "Futures of Education" initiative inaugurated that same year.

Our intention is not to attack neuroscience per se, but rather to offer a critique of "neuromania" (Legrenzi and Umilta 2011; Tallis 2011) or "the complete identification of persons with their brains and the misconceived hope that an improved understanding of the brain will tell us how to live well" (Rowson 2011, p. 5). The "neuro" fields that have proliferated in the wake of advancements in functional magnetic resonance imaging (fMRI) – including *neuro* education or educational neuroscience – study the "neurological underpinnings" of processes traditionally analysed from the perspective of the humanities and social sciences. Fernando Vidal argues that these neuro fields exhibit "ahistorical triumphalism" (Vidal 2009, p. 22) when claiming to provide fascinating and novel insights into humankind that will radically transform a given field (for our purposes, education). We draw on several interrelated theoretical perspectives critical of a *neuro*centrism that posits the brain as the principal or sole focus for analysis of teaching, learning and other functions of education (Satel and Lilienfeld 2013). Invoking Fernando Vidal and Francisco Ortega's (2017) concept of "the cerebral subject", we challenge the increasingly neurocentric tenor of international policy discourse. Taking ISEEA (Duraiappah, van Atteveldt, Borst et al. 2022) and its Summary for Decision Makers (SDM) (Duraiappah, van Atteveldt, Buil et al. 2022) as an exemplary case of *neuro*liberalism (Whitehead et al. 2018), we seek to explore the political, ethical and material implications for the pursuit of SDG 4 (mandating equitable achievement of "quality" education for all; UN 2015) of the ideology of "brainhood", and more specifically of a neuroliberal imaginary of education.

To some observers, advancements in neuroscience threaten to facilitate mind control reminiscent of an Orwellian dystopia (Blank 1999; Vidal 2009). The title we chose for this article, "Huxleyan utopia or Huxleyan dystopia?", speaks to two distinct visions of society advanced by two siblings: the evolutionary biologist and eugenicist Julian Huxley (1887–1975),<sup>3</sup> and his younger brother, Aldous, best known for his dystopian novel *Brave New World* (Huxley 1932), which is often compared to George Orwell's *1984* (Orwell 1949).<sup>4</sup> Julian Huxley's utopia – outlined in his contribution to the mid-1930s book series, *If I Were Dictator*<sup>5</sup> (Huxley 1934) – proclaimed a "scientific humanism" that subsequently informed his founding vision for UNESCO (Toye and Toye 2010). While Huxley's tenure as UNESCO Director-General lasted just two years (1946–1948), he nevertheless profoundly influenced the organisation's character and direction (Smocovitis 2016). Published two years after Aldous'

<sup>&</sup>lt;sup>5</sup> London publisher Methuen & Co. Ltd. commissioned a total of seven "uniform volumes" of the *If I were dictator* series. Besides Julian Huxley (vol. 3), the other authors were Baron Raglan (FitzRoy Richard Somerset) (vol. 1); Lord Dunsany (vol. 2) and St. John Ervine (vol. 4) in 1934; and James Maxton (vol. 5), H. R. L. Sheppard (vol. 6) and Vernon Bartlett (vol. 7) in 1935.



<sup>&</sup>lt;sup>3</sup> Julian Huxley – who was backed by the British scientific establishment – was appointed UNESCO's first Director-General over the classicist Sir Alfred Zimmern who had headed UNESCO's Preparatory Commission (Toye and Toye 2010).

<sup>&</sup>lt;sup>4</sup> The significant difference between the Orwellian and Huxleyan visions of dystopia is that, while fear is the dominant tool of control in the world of *1984* (Orwell 1949), in Huxley's *Brave New World* (Huxley 1932) it is primarily entertainment and mind-altering techniques that ensure the happy docility of an infantilised populace.

Brave New World, Julian's utopia sought to reassert the benignity of "a scientifically organised society that Aldous had portrayed as thoroughly malignant" (Himmelfarb 1968, n.p.). Our article emphasises the dystopian implications of ISEEA's emphasis on "brainhood" and techno-solutionism, which are highly reminiscent of Brave New World (Huxley 1932).

The article is organised as follows: We begin by briefly analysing UNESCO's early history under the leadership of its inaugural Director-General, Julian Huxley. His "One World" vision and philosophy of "scientific humanism" serve as the starting point for a review of contrasting visions of education embodied in UNESCO's landmark Faure, Delors and Futures of Education reports (Faure et al. 1972; Delors et al. 1996; ICFE 2021) on the one hand, and ISEEA (Duraiappah, van Atteveldt, Borst et al. 2022) and its SDM (Duraiappah, van Atteveldt, Buil et al. 2022) on the other. We highlight a striking contrast between the normative vocabulary of UNESCO's earlier seminal education reports and the ISEEA-SDM's calls for education policy to be informed by "science and evidence" (Duraiappah, van Atteveldt, Buil et al. 2022). As we show, the ISEEA-SDM invokes the rhetoric of "science and evidence" to promote predetermined agendas based on the ideology of brainhood (such as universal screening and personalised learning). In effect, the ISEEA-SDM weaponises neuroscience (and more broadly "the learning sciences") to dismiss insights derived from the social scientific study of education, and especially the findings of critical research into education's political and economic contexts (including critique of the implications of the growing educational role of Big Tech). Contrasting the centrality of democratic politics in the Faure, Delors and Futures of Education reports, with the neurocentrism underpinning the ISEEA-SDM, we demonstrate how MGIEP's preoccupation with brainhood and "personalised learning" and its weaponisation of neuroscience are depoliticising education, thereby undermining UNESCO's longstanding political and ethical mandate.

### "Scientific humanism" and "world citizenship" in UNESCO's landmark education reports

[P]ersonal liberty is, for the humanist, something of the highest value. He believes that ... it is better to go wrong in freedom than go right in chains .... Nevertheless, it may be that circumstances will compel the humanist to resort to scientific propaganda, just as they may compel the liberal to resort to dictatorship. Any form of order is better than chaos (Aldous Huxley 2014 [1933], p. 218).

... in the not very remote future the problem of improving the average quality of human beings is likely to become urgent; and this can only be accomplished

<sup>&</sup>lt;sup>6</sup> Huxley made these remarks in a radio broadcast two weeks before the 1932 publication of *Brave New World* (see Huxley, 2014 [1933], p. 218).



by applying the findings of a truly scientific eugenics (Julian Huxley 1946, p. 38).

Revisiting UNESCO's earliest pronouncements regarding "world citizenship" is appropriate at a time when the discourse of "global citizenship" has become ubiquitous and features prominently in the SDGs (especially SDG Target 4.7). The idea of "world citizenship" was central to mid-twentieth-century cosmopolitanism and contributed to shaping UNESCO's activities in a "curiously utopian moment" before the onset of the Cold War (Sluga 2010, p. 393). In the summer of 1946, UNESCO's soon-to-be founding Director-General, Julian Huxley, wrote a pamphlet entitled *UNESCO*: *Its purpose and its philosophy*, which set forth guidelines for the organisation as it launched into action (Huxley 1946). For Huxley, UNESCO was to embody "a scientific world humanism, global in extent and evolutionary in background" (ibid., p. 7):

[Scientific humanism] ... must embrace the spiritual and mental as well as the material aspects of existence ... It is essential for Unesco to adopt an evolutionary approach. ... which can provide the necessary intellectual scaffolding for modern humanism. ... An evolutionary approach provides the link between natural science and human history; ... it not only shows us the origin and biological roots of our human values, but ... is indispensable in enabling us to pick out ... those trends and activities and methods which Unesco should emphasise and facilitate (Huxley 1946, pp. 7–8).

As the opening quotations of this section reveal, Julian Huxley endorsed "scientific eugenics" as an instrument for realising his humanistic ideals. His brother Aldous had also approved eugenicist measures at one point, to arrest the "rapid deterioration ... of the whole West European stock" (Aldous Huxley 2014 [1933], p. 219). Both brothers were products of a generation to whom "scientific" manipulation of human "breeding", for the purpose of eliminating congenital disorders, enhancing health and constraining population growth, seemed conducive to progressive social goals. Their famous grandfather, the biologist and anthropologist T. H. Huxley, while sharply critical of cruder forms of Social Darwinism, tacitly endowed the evolutionary process with "ethical attributes" (Burrow 1966, p. 270), assuming a racial hierarchy topped by white Europeans. While the First World War seriously challenged the optimistic and racialist – Victorian association of biological evolution with social or ethical improvement, faith in eugenics (with or without explicitly racist overtones) remained widespread amongst European intellectuals of the interwar years. It was the Nazis' "Final Solution" that ultimately obliterated any appeal that scientific planning and eugenics once held for Aldous. For him, the pursuit of "order and happiness" through a pre-ordained caste system based on scientifically engineered intelligence, psychological manipulation, emotional engineering, moral propaganda, adult reconditioning

<sup>&</sup>lt;sup>7</sup> Originally intended as an official UNESCO document, the already printed pamphlet was eventually distributed with a "slip of paper ... inserted into it" which stressed that it was "in no way an official expression of the views of the [agency's] Preparatory Commission" (Toye and Toye 2010, p. 328).



and pharmaceutical control, as depicted in *Brave New World* (Huxley 1932), became the basis of a profoundly dystopian satire.

Julian Huxley's commitment to "scientific eugenics" – which survived the horrors of Nazism – reflected his belief in evolution towards a "world civilisation": a singular, uniform human culture shared by "world citizens" inhabiting a "world community" (Sluga 2010, p. 393). UNESCO's initially fulsome embrace of "world citizenship" was dropped in 1952 in the face of McCarthyite American attacks on the organisation's "One World" intentions (ibid., p. 417). Ideas of "world citizenship", if not the term itself, nonetheless remained implicit in the Faure report's rearticulation of "scientific humanism" for the 1970s, but in a manner that departed from Julian Huxley's evolutionary vision of "One World". The Faure Commission argued that

an individual should avoid systematically setting up his [sic] beliefs and convictions, his ideologies and visions of the world, his behaviour and customs as models or rules valid for all time, all civilizations and all ways of life (Faure et al. 1972, p. 147, emphasis in original).

Edgar Faure had previously served as a junior prosecutor at the Nuremberg trials and was terrified of eugenics and of abuses of modern media and "brain science" for purposes of manipulation and control (Faure et al. 1972, pp. xxiv, 102; see also Elfert 2018). "Modern communication media", he wrote in his Preamble to the Commission's report, "has provided political and economic authorities with extraordinary instruments for conditioning the individual, ... especially as a consumer and as a citizen" (Faure et al. 1972, p. xxiv). A section on "scientific humanism" in the report's Chapter 6 on "Goals" concludes by calling for "training scientific minds" (ibid., p. 148). Faure still adheres to a narrative of progressive social evolution, but this is no longer represented as unilinear or inevitable, and is shorn of any association with eugenics. It is anticipated that one outcome of a universal awakening to the truths of science will be a unified ethical outlook informing what amounts to "world citizenship". The Faure report states:

Societies in our time have the experience and the existing or potential resources required ... to help man fulfil himself in every possible way – as agent of development and change, promoter of democracy, citizen of the world, author of his own fulfilment – and to help him find his path through reality towards the ideal of the complete man (Faure et al. 1972, p. 158).

This optimism wanes considerably in the Delors report released 24 years later, which notes that

the extraordinary technological and scientific progress which has marked the [20th] century has not led to a better balance between human beings and nature, or to more harmony in human relations (Delors et al. 1996, p. 209).

The Delors report abandons the notion of "scientific humanism", but reaffirms world citizenship, emphasising that "people need gradually to become world citizens with-



out losing their roots and while continuing to play an active part in the life of their nation and their local community" (ibid., p. 17).

In UNESCO's latest seminal report, released in 2021, explicit references to "scientific humanism" and "world citizenship" are absent. Instead, reflecting the exacerbation of environmental problems since the 1990s and highlighting global citizenship education as enshrined in SDG Target 4.7, it speaks of "a consciousness of the planetary" and "planetary interdependences" (ICFE 2021, p. 113) and calls for a "new eco-consciousness and ... reframed humanism" (ibid., p. 115). In addition, it invokes the notions of "active citizenship" (ibid., pp. 4, 39, 40, 73) and "activism" (ibid., pp. 3, 39, 40, 74) as means of countering what is referred to as "democratic backsliding" (ibid., pp. 3, 8, 39, 40). The latter term implies continued adherence to a normative ethical framework and faith in a progressive, evolutionary trajectory, albeit now portrayed more tentatively and as susceptible to regrettable reverses. The next section further explores the centrality of democratic politics in the Faure, Delors and Futures of Education reports.

## The Faure, Delors and Futures of Education reports: humanism against technocracy, and the centrality of politics

The Faure report – once touted as the "humanist educational manifesto of the twentieth century" (Torres 2013, p. 15) – propounds a highly philosophical and utopian vision of the future of education (Elfert 2018). It was partly a response to the reckoning that followed the radical, "new leftist" protests of 1968 in France and elsewhere, in which demands for educational reform had featured prominently. It also sought to (re-)assert UNESCO's authority in the education field in response to encroachments by the World Bank and the United Nations Development Programme (ibid.). A striking feature of the report for the 21st-century reader – or at least the social scientist – is its unabashed espousal of a universalist notion of "progress". In his Preamble, Faure argues that developments in science and technology, consequent enhancements of material prosperity, and transformations to social life and the world of work, promise to usher in "the age of total man" (Faure et al. 1972, p. xxxix). "Lifelong education" enabled by "learning to learn" will be essential to meet the demands of rapid change in patterns of employment, involving a "dismantling" of the "diploma-employment mechanism which the economies of many countries ... will not always be able to satisfy" (ibid., p. xxix). Managed well, a transition to lifelong learning harnessing new communication technologies could yield, Faure argues, a "qualitative transformation ... renewing [man's] genius" (ibid., pp. xxi-xxii). Chapter 5, on "Discoveries", reviews "new findings" from research on brains, psychology, genetic epistemology, cognitive process, algorithms, information theory and cybernetics (ibid., pp. 106-116), as well as "new developments from science and technology" (ibid., pp. 116-133). Faith in "progress" supported by "science" thus permeates the Faure report to an extent often overlooked by those who emphasise its humanist outlook.

Faure, however, was acutely conscious not only of the dangers of technocracy, mechanisation and alienation threatened by poorly managed technological change, but also of autocracy and other challenges to democracy and human dignity. For



Faure, the most fundamental threat was "the emergence of a dichotomy within the human race" between "superior and inferior groups", leading to a "de-humanisation, affecting privileged and oppressed alike" (ibid., p. xxi). His report's Chapter 6 on "Goals" ends with a note cautioning that the ultimate aims of education must be "based on a broad consensus" and "cannot be left entirely to politicians' discretionary desires or to scientists' knowledge" (ibid., pp. 158–159). Ensuring that mankind would instead "promote the sciences without becoming enslaved by them" (ibid., p. xxvii; italics in original) demanded an education that would provide "strong support" to "democracy" (ibid., p. xxvi; italics in original). In a passage italicised for emphasis, Faure elaborated the centrality of democratic politics:

[D]emocracy ... can no longer be limited to a minimum of juridical guarantees protecting citizens from the arbitrary exercise of power in a subsistence society. ... [M]ore support must also be given to educational requirements, for there cannot ... be a democratic and egalitarian relationship between classes divided by excessive inequality in education; and the aim and content of education must be recreated, to allow ... for the new features of society and the new features of democracy (Faure et al. 1972, p. xxvi; italics in original).

"For these reasons", he concluded, "the commission stressed the fact that education must be regarded as a domain where political action is of especially decisive importance" (ibid.; italics in original).

The universalistic character of the Faure report's humanism may have caused its authors to underplay the significance of cultural diversity for divergent conceptions of education's aims. The subsequent Delors report of 1996, with its talk of "learning to live together" (Delors et al. 1996, p. 91), gave more weight to the diverse manner in which educational goals might be expressed. In a chapter entitled "Choices for education: the political factor", the Delors Commission stressed that "choice of education means choice of society" (ibid., p. 156), and *vice versa*. Responding to the rise of neoliberal globalisation and the threat he saw this as posing to the liberal democratic order, Delors was more "disenchanted" than Faure and observed "a crisis of democracy" (Elfert 2018, p. 187). The Delors report recapitulated many of the ideals articulated by Faure and his Commission, similarly emphasising the "political factor".

Half a century after the Faure report and a quarter century after the Delors report, UNESCO released a new seminal report amidst the COVID-19 pandemic in 2021. The Futures of Education report, entitled *Reimagining our futures together: A new social contract for education*, reasserts the centrality of democratic politics in shaping education policy and practice, raising concerns that "the fabric of civil society and democracy is fraying in many places around the world" (ICFE 2021, p. 1). The report's call for "a new social contract for education" resonates with the Faure report's warnings, in its chapter on scientific humanism, of the dangers of autocracy and technocracy (see above). The Futures of Education report asserts:



Critical thinking, innovation, and the realization of individual and shared purposes thrive in participatory democratic settings where human rights are respected (p. 39).

This report's proposals for renewing education include developing curricula that foster students' capacity to "critique and apply" knowledge as well as "scientific, digital and humanistic literacies that develop the ability to distinguish falsehoods from truth" (ibid., p. 4). "In educational content, methods and policy", the Futures of Education report proposes, "we should promote active citizenship and democratic participation" (ibid.). It identifies "authoritarianism, exclusionary populism, and political extremism" as challenges to democratic governance, and notes "a crisis of values evidenced by the rise in corruption, callousness, intolerance and bigotry, and the normalization of violence" (ibid., p. 9).

The centrality of democratic politics in the Faure, Delors and Futures of Education reports marks a sharp contrast with the main arguments and recommendations of the ISEEA-SDM (Duraiappah, van Atteveldt, Buil et al. 2022), to which we turn next. Given that the full ISEEA report (Duraiappah, van Atteveldt, Borst et al. 2022) consists of four major sections (Human flourishing; Context; Learning experience; and Data and evidence)<sup>8</sup> encompassing 25 chapters and totalling 1,800 pages, the analysis below focuses solely on the ISEEA-SDM. It should be noted that this in fact misrepresents the findings presented in the main body of the report, with the ten chapters of the ISEEA "Context" Working Group offering arguments more in line with those of the Faure report (Vickers 2022). However, limited space prevents us from dissecting the entire report here, and it is the ISEEA-SDM that the MGIEP leadership has used to disseminate its preferred interpretation of ISEEA's findings. The next section therefore discusses the ISEEA-SDM's embrace of neurocentrism and techno-solutionism and its drastic deviation from the humanistic outlook that has suffused UNESCO's landmark educational reports from Faure onwards.

## Depoliticising education, weaponising "science and evidence": implications of neuroscience and digital technology for the Futures of Education

ISEEA is an attempt by MGIEP to "assess" the state of knowledge on education, modelled after efforts of the United Nations (UN) to assess global environmental knowledge through massive reviews mobilising thousands of scientists, such as the Intergovernmental Panel on Climate Change (IPCC) Assessment reports<sup>9</sup> and the Millennium Ecosystem Assessment reports<sup>10</sup> (Duraiappah and van Atteveldt 2022). ISEEA's overall design is thus informed by an assumption that education (equated primarily with "human learning" or the mental processes involved in learning, rather

<sup>&</sup>lt;sup>10</sup> For Millennium Ecosystem Assessment, visit <a href="https://www.millenniumassessment.org/en/index.html">https://www.millenniumassessment.org/en/index.html</a> [accessed 22 November 2022]



<sup>&</sup>lt;sup>8</sup> The four major sections were developed by four "Working Groups".

<sup>&</sup>lt;sup>9</sup> For IPCC assessment reports, visit https://www.ipcc.ch/reports/ [accessed 22 November 2022].

than conceptualised as a social practice) can be analysed in the same manner as the natural environment, yielding a "scientific" consensus regarding steps needed to improve it. Underlying such an assumption is a biologistic understanding of humanity – echoing Julian Huxley's sweeping statement of 90 years ago: "all living things, ... including ourselves, work according to regular laws" (Julian Huxley 2014 [1933], p. 111). While it is undeniable that we are neurobiological beings, neurocentrism (as distinct from neuroscience *per se*) carries troubling implications for the educational realm.

In what follows, we analyse how the ISEEA-SDM exemplifies a "neuroliberal imaginary" comprising neurocentrism, neoliberal rationality, and techno-solutionism. Neurocentrism is closely aligned with "hegemonic forms of psychological science", which "lend scientific authority to neoliberal ideology" by portraying psychological processes as "independent of cultural–ecological or historical context and by championing individual growth and affective regulation as the key to optimal well-being" (Adams et al. 2019, p. 190). <sup>11</sup> Neoliberalism, long-established as the global economic orthodoxy, assumes the superior efficiency and justice of markets. In the neoliberal "MarketWorld" (Giridharadas 2019), policy is reduced to problem-solving: rather than balancing or reconciling conflicting interests or ethical visions, policymaking – in education as in other fields – is conceived as a purely technocratic exercise. This mindset encourages "techno-solutionism", or

a mode of intervention based on "technological fixes" and "silver-bullet solutions", which tend to erase contextual factors and marginalise other rationales, values, and social functions that do not explicitly support technology-based innovation efforts (Marelli et al. 2022, p. 1).

The prevalence of "techno-solutionism" both reflects and reinforces impatience with the humanities and qualitative social sciences, and heightened expectations of "science" (see Hao and Zabielskis 2020). In a *neuro*liberal vision of society as an aggregate of cerebral subjects, solving social problems means not critiquing our established collective arrangements, but enabling individuals better to adjust themselves to them – a task to which psychology and "brain science" seem ideally suited, as depicted in *Brave New World* (Huxley 1932).

### Preoccupation with the biological brain

What marks the ISEEA-SDM's embrace of neuroscience apart from Julian Huxley's brand of "scientific humanism" is its almost total exclusion of politics and ethics. Huxley's commitment to "scientific eugenics" was a conscious reaction to what he

<sup>&</sup>lt;sup>11</sup> It should be noted that, while neuroscience and psychology are closely aligned, there are well-documented tensions between the two fields. For example, the psychologist Jeff Bowers has fiercely attacked the work of educational neuroscientists (Bowers 2016a, 2016b), eliciting a furious response from several of the latter (Gabrieli 2016; Howard-Jones et al. 2016). This exchange demonstrated both the close alignment between the two fields in terms of focus or "problématique", and how some of those in the "neuro" field, supremely confident of their "scientific" superiority, evince an "ahistorical triumphalism" and dismissiveness towards those from other disciplinary backgrounds (Vidal 2009).



saw as pseudo-scientific Nazi eugenics. Although his utopianism was tainted by the intertwining of late 19th-century evolutionism with Western imperialism (Sluga 2010), his "unifying vision" was informed by a "liberal, progressive and secular" political philosophy "at the same time that it supported an autonomous science of biology" (Smocovitis 2016, p. 49). By contrast, the ISEEA-SDM presents itself as value-neutral by eschewing engagements with (i) democracy; (ii) the human search for meaning and morality; and (iii) social and political emancipation. The ISEEA-SDM features no discussion of the relationship between education and democracy. Whereas the term "democracy" appears 39 times and "democratic" 68 times in the 299-page Faure report (excluding the index), these terms are almost entirely absent from the 108-page ISEEA-SDM (Duraiappah, van Atteveldt, Buil et al. 2022). By contrast, the ISEEA-SDM features 29 references to "brain" and 24 to words including the prefix "neuro". Grounding its claims to universality and objectivity in neuroscience, it discursively constructs "learners" as "cerebral subjects" reducible to their brains (Vidal and Ortega 2017). 13

Philosophers have challenged us to consider how we derive conclusions concerning our morals, meaning or well-being if immaterial and non-physical "mind", "soul" or "self" are reduced to biologically-determined functions of the brain. As Daniel Busso and Courtney Pollack put it, "by locating explanations for student behaviour 'in the brain', we may be depriving them of responsibility [for] and control over their actions" (Busso and Pollack 2014, p. 11). Animated by such "neuroexistentialist" concerns, scholars have reflected on claims that the subjectivity and conscious choices that define us as persons can effectively be reduced to neural and psychological factors (Caruso and Flanagan 2018). Neuroscience, to the extent that it can plausibly claim to identify biological determinants of our thought processes (a claim widely disputed: see Gabriel 2019; Cobb 2020), shakes our beliefs about agency, autonomy, responsibility and human dignity by suggesting that we may not have control of our behaviour as conscious beings. But the ISEEA-SDM acknowledges no such concerns. Reflecting its authors' failure to think through the implications of their neuro-determinist beliefs, the ISEEA-SDM features axiomatic endorsements of the importance of "learner agency", "student agency" and "teacher agency" (Duraiappah, van Atteveldt, Buil et al. 2022, pp. 13, 27, 49, 52, 65, 67, 77, 87, 101), alongside repeated calls for "whole-brain learner-centric" education (pp. 5, 13, 77, 99, 101,  $102).^{14}$ 

<sup>&</sup>lt;sup>14</sup> The ISEEA-SDM (Duraiappah, van Atteveldt, Buil et al. 2022) also features familiar, banal recommendations such as "support and strengthen school-community partnerships to promote more localized, place-based curricula to link learning to real world problems learners face daily" (Key Recommendation 7; ibid., p. 101), "enhance teachers' flourishing by recognizing the importance of the profession" (Key



<sup>&</sup>lt;sup>12</sup> The word "democracy" appears only once in the ISEEA-SDM, in a reference to the Faure report (Duraiappah, van Atteveldt, Buil et al., 2022, p. 15). The term "democratic" appears twice: in relation to "liberal democratic countries-regions" (ibid., p. 54); and to "democratic dialogue" in the work of the Futures of Education Commission (ibid., p. 7).

<sup>&</sup>lt;sup>13</sup> It is important to note that neuroscience is also prominently featured in UNESCO's latest seminal report on education. The 166-page Futures of Education report (excluding Appendices) features 17 references to "brain" and 18 to words including the prefix "neuro" (ICFE 2021). It hails "neuroplasticity" (ibid., pp. 38, 124) and calls for "[m]obilizing the learning sciences" (ibid., p. 124). However, it also features 10 references to "democracy" and 40 to "democratic".

The ISEEA-SDM posits the brain, rather than the socially situated individual, as the locus of the learning process. This implicitly reduces the teacher to "a kind of social stimulus acting upon regions of a student's brain", presenting "an impoverished view of what really goes on in classrooms" (Busso and Pollack 2014, p. 179). <sup>15</sup> In the ISEEA-SDM, it is not just an understanding of learners and teachers that is impoverished. Also conspicuously absent is a sense of the human search for purpose and meaning as a diverse, ongoing, open-ended process. ISEEA's Working Group 1 takes "human flourishing" as its theme, but ISEEA's conceptual framework portrays this as a fixed, predetermined, universal objective of "learning" (Duraiappah et al. 2021). "Human flourishing" is reductively defined in the ISEEA-SDM as

the explicit training (teaching and learning) of social-emotional skills ... such as empathy, mindful awareness, and compassion in conjunction ... with cognitive skills such as numeracy and literacy (Duraiappah, van Atteveldt, Buil et al. 2022, p. 73).

Invocations of "science" notwithstanding, the ISEEA-SDM's narrowly instrumentalist conceptualisation of "human flourishing", and of "learning" conducive thereto, is ultimately grounded in an ideological preoccupation with brainhood and neoliberal rationality. Despite its explicit attempt to articulate "education for human flourishing" as opposed to education for human capital formation (ibid., Key Finding 1.2; pp. 28–29), the ISEEA-SDM reduces education to skillification and uncritically endorses its role in generating a productive (i.e. mentally healthy, resilient and skilled) workforce and a pliable, politically docile citizenry. In the neuroliberal imaginary the ISEEA-SDM exemplifies, education's function is simply to maximise an individual's capacity rationally to comprehend their interests and pursue them competitively, while preserving the social stability upon which the smooth operation of markets depends. The ISEEA-SDM's conceptualisation of human flourishing resonates with "skill-and-emotion-based behavioural governance" (Mertanen et al. 2022, p. 732), which reduces education to "more efficient individually tailored and personalised behavioural management, optimisation, teaching and learning" (ibid., p. 736), disregarding more philosophically and politically oriented perspectives. Described as a form of "precision education governance", this promises "an enhancement of the efficiency of education through individualisation and 'precision'", making it "possible to assess, control and calculate individuals 'learning' (ibid., p. 737).

Furthermore, reflecting a preoccupation with the brain as a biological organ, rather than with the mind more broadly understood as a conscious, self-reflecting, "open-

Recommendation 8; ibid.), and "involve parents as partners" (Key Recommendation 9; p. 102). However, these are not framed as in moderating or lending nuance to the document's guiding vision, but are instead aligned with or refracted through its pervasive neuroliberalism. For example, Key Recommendation 8 highlights the importance of "building [teachers'] social and emotional competencies" (ibid., p. 101), and Key Recommendation 9 calls for involving parents as partners in the "implementation of whole-brain learner-centric education" (ibid., p. 102).

<sup>&</sup>lt;sup>15</sup> It should be noted that this sort of reductionist "stimulus-reaction" paradigm is not characteristic of neuroscience in general, but rather of neurodeterminism in particular. Nor is this sort of reductionism exclusive to the natural sciences; indeed, it is commonly found in social science fields such as economics.



ended process of creation of self-conceptions of itself? (Gabriel 2019, pp. 16–17), the ISEEA-SDM fails to engage with the question of human emancipation. The ISEEA-SDM proposes "universal screening of all young students for early predictors of academic achievement" (Duraiappah, van Atteveldt, Buil et al. 2022, p. 82) to enable "early intervention at a time in a child's development when their brains are mostly plastic and struggle has not manifested as a norm" (ibid., p.100). In a number of Western societies, the emphasis on early intervention to address neurological "risk factors" has coincided with erosion of welfare policies based on principles of shared responsibility, universal protection and equality of outcomes (Edwards et al. 2015). Echoing extreme forms of neuroscientific boosterism aimed at lay people (of a kind criticised by both neuroscientists and social scientists; see Pitts-Taylor 2010; Farina 2017), the ISEEA-SDM's proposals for universal screening and early interventions simultaneously affirm biological determinism and hail neuroplasticity. 16 Invoking "plasticity" appears potentially liberating; if the brain is "plastic", then it is not genetically hardwired and can be rewired. But with the ISEEA-SDM emphasising that it is very young brains that are at their most plastic, fundamental questions arise concerning purpose and agency: who has the right to manipulate young "brains", and for what ends? Those gripped by a reductive focus on the biological brain seem uninterested in such questions. We further elaborate the ISEEA leadership's apparent neglect of human emancipation in our discussion below of their embrace of personalised learning through digital technology.

### Personalised learning and techno-solutionism

The ISEEA-SDM's demand for personalised learning through digital technology (Duraiappah, van Atteveldt, Buil et al. 2022) finds certain echoes in the Faure report's call for education to be "individualised and personalised to the utmost" with the assistance of technology (Faure et al. 1972, p. 234, emphasis in original). Given Biesta's condemnation, as "learninfication", of the discursive shift from education to learning, it seems odd that, in his article for this special issue that fulsomely endorses Faure (Biesta 2021), he overlooks the Faure report's advocacy of "a shift from education to learning involving greater co-ordination and control promised by the mass media, with a future featuring algorithms and cybernetics" (Hake 2021, p. 135; referring to Faure et al. 1972, pp. 102, 105, 106, 115, 143, 144). However, as discussed above, the Faure report balances such enthusiasm for technology with emphatic warnings of its potentially dehumanising effects. In this final section of our article, we seek to explain how the treatment of technology in the ISEEA-SDM relates to its neglect of ethical and political context, an aspect of its approach that contrasts strikingly with the outlook of the Faure, Delors and Futures of Education reports.

<sup>&</sup>lt;sup>17</sup> As Barry Hake (2021) notes, it may be too simplistic to posit a dichotomy between Faure's "humanistic" vision of "lifelong education" and the OECD's instrumentalism (for example). Contemporary responses to Faure included a 1974 manifesto, "The Price of Lifelong Education" (CIDOC 1974), produced by a multinational gathering of public intellectuals, prefiguring precisely the kinds of criticisms levelled by adult education scholars against the OECD's "recurrent education" model (Hake 2021, pp. 130, 132).



<sup>&</sup>lt;sup>16</sup> Neuroplasticity refers to structural (anatomical/morphological), functional (physiological) and neuro-chemical changes in the brain.

Recent years have witnessed increasing attention to EdTech in global education policy debate, with the COVID-19 pandemic accelerating moves, partly facilitated by international organisations, by for-profit providers of digital technology to promote their platforms and secure market share (Morris et al. 2022; Marelli et al. 2022). While the Futures of Education report warns of "inherent contradictions in digitalization and digital technologies" and "significant threats [posed by digital technology] to knowledge diversity, cultural inclusion, transparency, and intellectual freedom" (ICFE 2021, p. 35), the ISEEA-SDM emphatically hails the transformative potential of technology for learning. "Education Technology (EdTech) or Digital Pedagogy", we are told,

can help all students, in particular students with special needs[,] to concentrate on tasks and provide opportunities in simulations, basic drills/practice, and communication, while also increasing higher-order thinking and aiding pedagogical practices (Duraiappah, van Atteveldt, Buil et al. 2022, Key Finding 2.5, p. 53).

Promotion of technology is frequently linked in the ISEEA-SDM to potential gains for neurodiverse<sup>18</sup> learners:

artificial intelligence in educational development (AIED) provides robust tools for the development of personalised learning for students with social anxiety, autism spectrum disorder, and specific learning difficulties, such as dyslexia and dyscalculia (ibid., Key Finding 2.5, p. 53).

The Co-Chairs of ISEEA (an economist and a neuroscientist) see the report in part as a cri de coeur from scientists concerned that those with differently "wired" brains, such as dyslexic children or sufferers from depression and other mental disorders, are poorly served by "traditional" educational practice and mainstream educational studies (ibid., p. 61). For them, it follows that education must be "reimagined" with the help of "the sciences of learning" to "maximise human flourishing" (ibid., Key Question 4, p. 20). However, they ignore how such reimagining may be conditioned by social, political and cultural context, including the public prestige and authority of science in contemporary society. Although the ISEEA-SDM does acknowledge that context influences, and is influenced by, education (ibid., Key Finding 4.2, p. 74), it fails to acknowledge that sciences, too, are heavily influenced by "representations, values, hopes and practices rooted outside their professional boundaries" (Ortega and Vidal 2007, p. 256). Nor does the ISEEA-SDM recognise the so-far tenuous contribution of cognitive neuroscientific research to improving classroom teaching and learning in general (see Bruer 2015; Bowers 2016a, 2016b), 19 much less to promoting education for peace, sustainable development and global citizenship in particular.

<sup>&</sup>lt;sup>19</sup> See Bruer (1997) for an early critique of what he termed the "neuroscience and education argument" (ibid., p. 4), which has sparked a number of both negative and positive responses over the past 25 years.



<sup>&</sup>lt;sup>18</sup> Neurodiversity takes into account that learners have different brains, resulting in variations in cognition, learning, behaviour and socialisation.

Indeed, the ISEEA leadership sees the application of EdTech as extending even to the guiding of learner socialisation, hailing the putative role of "social robots" as "valuable tools for social-emotional learning" (Duraiappah, van Atteveldt, Buil et al. 2022, Key Finding 2.5, p. 53). Barely acknowledging the significance of culture, or of how it conditions diverse understandings of the purpose of education, the ISEEA-SDM envisages robotics engineers and neuroscientists as perfecting means of adapting learners to their societal context. The authors thus unwittingly evoke the role assigned to psychology in the governance of totalitarian societies (where psychological deviants may be slated for "readjustment") as imagined in Brave New World (Huxley 1932), and practised in the former Soviet Union. Rather than raising children, the ISEEA-SDM seems interested primarily in designing them through interventions that alter their "behaviours and dispositions through physical and instrumental means, such as via neuro-chemical enhancement" (Busso and Pollack 2014, p. 180). The ISEEA-SDM's embrace of social-emotional learning (SEL) ostensibly signals a more caring ethos, but in fact reflects a vision of socialisation as a matter of attuning individuals to a given socio-political context, rather than equipping them with tools to challenge, critique or transform it (Bryan 2022; Mochizuki forthcoming).

Several of the ISEEA-SDM's specific recommendations concerning the application of neuroscience and technology are unproblematic in themselves; what is problematic is their broader framing within a crudely scientistic, instrumentalist and hyper-individualist socio-political agenda. For example, there are unobjectionable proposals for therapeutic interventions ("specialised help") to augment the capacities of students with learning disabilities (Duraiappah, van Atteveldt, Buil et al. 2022, p. 41). However, such proposals are embedded in a broader vision of a "personalised" learning experience for every learner ushered in by putative scientific or technological advances. Early, universal "screening" (ibid., p. 81) of children<sup>20</sup> will assess their learning potential, ongoing "monitoring" will inform "interventions" (ibid., p. 100), and "a global database" is envisaged as "[facilitating] personalised learning experiences for all learners across the world" (ibid., p. 101). This database, we are told, should involve collaboration amongst private corporations, states and international agencies to ensure access to "curricula, pedagogies, teacher-training tools, and learner assessments to facilitate a whole-brain learner-centric learning experience via AI that is open, transparent, and secure" (ibid., p. 101). These recommendations together perfectly reflect "larger global trends where young people's education is becoming more individualised, privatised, behaviourised and datafied than ever" (Mertanen et al. 2022, p. 737).

The idea of "a personalised learning experience" as "an entitlement and a human right" (Duraiappah, van Atteveldt, Buil et al. 2022, p. 13) may seem appealing. However, coupled with enthusiastic advocacy for neuroscientific and technological intervention, this idea resonates with "precision education governance" (Mertanen et al. 2022, p. 737) and carries troubling implications. Prominent among these are concerns already noted with the deterministic, eugenicist connotations of a narrowly

<sup>&</sup>lt;sup>20</sup> The ISEEA-SDM envisages categorising learners through assessment of their brain-based "potentiality" (Duraiappah, van Atteveldt, Buil et al. 2022, p. 13), but is somewhat vague regarding screening methods.



brain-preoccupied vision of learning, which serves to "legitimise scientific, behavioural, psychological, neurological and personalised management of children, young people and adults" (Mertanen et al. 2022, p. 736). Moreover, given the global scope of ISEEA (Duraiappah, van Atteveldt, Borst et al. 2022) as a UNESCO report, it is problematic that, even if we accept that neuro-educational products may have useful therapeutic applications, their expense often impedes their global availability (Busso and Pollack 2014, p. 5). Apart from the up-front cost of neuro-educational products, their widespread use also involves significant opportunity costs. As Busso and Pollack (2014) suggest, emphasis on brain-based solutions often comes at the expense of potentially more effective interventions which can help to ameliorate students' learning difficulties. In short, the portrayal of "personalised learning" as a "right" to be realised through mass adoption of EdTech and neuroscience threatens to reinforce a reductive, depoliticised vision of education focused on individual learners (or their brains), while exacerbating educational inequality and enriching Big Tech (Vidal and Ortega 2017). An uncritical uptake of neuroscience and digital technology, as championed by MGIEP, risks undermining or marginalising attention to ethics and politics in attempts to address, through education, our human and planetary predicament.

### **Conclusion**

UNESCO's seminal educational reports have tended to be coloured by an optimistic "belief that what ought to be necessarily would be" (Burrow 1966, p. 277), traceable to the Victorian faith in science as a progressive force. But the vestigial influence of evolutionary social theory has been tempered by awareness of the complex historical, political and social contexts in which education systems actually operate. The barbaric abuse of evolutionary theory and modern technology during the Second World War further instilled in UNESCO's founding generation, encompassing both Julian Huxley and Edgar Faure, a certain caution in applying purportedly "scientific" insights in the realm of education. By contrast, the authors of the ISEEA-SDM, in their scientistic fervour, recall the lament of the historian Eric Hobsbawm, when he wrote that "Most young men and women at the [20th] century's end grow up in a sort of permanent present lacking any organic relation to the public past of the times they live in" (Hobsbawn 1994, p. 3).

If the Faure report represented a confluence of unabashed post-Enlightenment utopianism and the critical and emancipatory spirit of the late 1960s, the ISEEA-SDM exemplifies a troubling combination of early 21st-century techno-solutionism, neoliberal rationality and neurocentrism. While sharing Julian Huxley's optimistic embrace of "science" for the betterment of humanity, the ISEEA-SDM ignores or dismisses questions of ethics and politics with which both Huxley and Faure were deeply concerned. Unlike Huxley and UNESCO's landmark reports, the ISEEA-SDM disavows any serious critique of economic orthodoxy or the established sociopolitical order as they impinge upon the human condition. Instead, it attempts to "enlighten" the community of educators and educational scholars with purportedly revolutionary new insights from neuroscience.



Faure's attention to the political dimension of education is almost entirely absent from the ISEEA-SDM. This depoliticisation is associated with a highly reductive focus on "brains" and the pursuit of "human flourishing" through the "socio-emotional" adaptation of individuals to a given socio-political context. The pedagogical insufficiency of this should be all the more glaring given the enormity of the challenges today's young people will face as a consequence of our current climate crisis, with all its social, political and economic ramifications. In stark contrast to Faure, the ISEEA-SDM ignores the eugenicist, potentially totalitarian, implications of embracing science. Indeed, the *neuro*liberal imaginary exemplified in the ISEEA-SDM's recommendations points towards a dystopian "brave new world" premised on what one neuroscientist has hailed as a "new humanism" or "a new Renaissance" ushered in by "the double revolutions in Neurotechnology and AI" (Yuste 2019, p. 3).

It is too early to gauge the reception of the ISEEA-SDM by UNESCO Member States, but arguments advanced in this article should compel education scholars to critically examine the implications of a potential neuroliberal turn on the part of the organisation, and a corresponding endorsement of "precision education governance" (Mertanen et al. 2022, p. 737). These implications concern not only the longstanding fault lines between the OECD and UNESCO, but also tensions and contradictions within UNESCO as it struggles to reassert its intellectual leadership in the education field. They also involve the use of the UNESCO imprimatur to advance, under the banners of peace, sustainability and humanism, educational agendas that on close inspection turn out to be profoundly antipathetic to those ideals.

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