# CHAPTER 23

# Academic Freedom Swimming against the Technological Tide

CHAVAN SHARMA KISSOON AND TERENCE KARRAN

#### Introduction

Over the past decade, a key trend in the UK higher education (HE) sector has been the embrace of digital transformation by UK HE institutions to make their operations leaner and more efficient and to expand the scope and reach of their teaching and research via digital technology-enabled efficiencies.¹ However, while these undoubted affordances of digital transformation for universities, researchers, and teachers are often what is accentuated in official institutional materials and research on digital transformation more generally, less attention has been given to how digital transformation shapes the individual autonomy of academics through the introduction of new digital education governance modes of technology-enhanced management.²

See, e.g., Oxford University, "Oxford's Digital Transformation," www.ox.ac.uk/students/news/2023-01-06-oxford-s-digital-transformation; University of Edinburgh, "Digital Transformation," www. ed.ac.uk/digital-transformation; University of Leeds, "Digital Transformation: University of Leeds Strategy 2020 to 2030," https://spotlight.leeds.ac.uk/strategy-digital-transformation/index.html.

<sup>2</sup> Sascha Kraus et al., "Digital Transformation: An Overview of the Current State of the Art of Research," SAGE Open 11 (2021): 1; Swen Nadkarni and Reinhard Prügl, "Digital Transformation: A Review, Syn-

Within the context of the UK's highly marketized HE sector, where hyper-managerial approaches are normalized, working conditions are pressured, and work contracts are precarious, there has been an unacknowledged creep of technology-enabled management practices that are further eroding academic freedom.3 Alongside this growth in technology-enabled management practices, there has been a corresponding culture change toward both university management and academic staff (the managers and the managed) coming to commonly perceive themselves through a quantified performance lens.4 At the same time, while digital education governance management practices have taken root and are establishing themselves as part of the UK HE management toolkit and becoming part of the HE sector's everyday neoliberalism, less discussed are the precise ways in which digital education governance is shaping long-established academic freedom norms in the UK HE sector.5 This, perhaps, is due to "the role of digital instruments in governing and guiding the conduct of diverse educational actors and institutions" being underappreciated due to the esoteric nature of digital technologies in terms both of how they work and of the logic that underpins their functioning.6 A consequence of this is that organizational digital technology is rarely recognized as a variable that has the potential to significantly alter the ways in which academic freedom is operationalized in the modern UK university.

Academic freedom is explicitly recognized as a core value of the UK HE sector by Universities UK, the collective body representing 140 UK-based universities. Furthermore, a large number of universities have introduced

thesis and Opportunities for Future Research," *Management Review Quarterly* 71 (2021): 233; Ben Williamson, "Digital Education Governance: An Introduction," *European Educational Research Journal* 15 (2016): 3.

<sup>3</sup> Morag Munro, "The Complicity of Digital Technologies in the Marketisation of UK Higher Education: Exploring the Implications of a Critical Discourse Analysis of Thirteen National Digital Teaching and Learning Strategies," International Journal of Education Technology in Higher Education 15 (2018); Mark Erickson, Paul Hanna, and Carl Walker, "The UK Higher Education Senior Management Survey: A Statactivist Response to Managerialist Governance," Studies in Higher Education 46 (2021): 2134; Chavan Kissoon and Terence Karran, Academic Freedom in the Digital University (London: University and College Union, forthcoming).

<sup>4</sup> Björn Hammarfelt, Sarah de Rijcke, and Alexander D. Rushforth, "Quantified Academic Selves: The Gamification of Research through Social Networking Services," *Information Research* 21 (2016), http://InformationR.net/ir/21-2/SM1.html.

<sup>5</sup> Williamson, "Digital Education Governance"; Fabian Cannizzo, "Tactical Evaluations: Everyday Neoliberalism in Academia," *Journal of Sociology* 54 (2018): 77.

<sup>6</sup> Williamson, "Digital Education Governance," 11.

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policies stating their appreciation of the value of academic freedom and their commitment to protecting it.<sup>7</sup> Within these institutional policy documents, academic freedom is variously framed. For the University of Nottingham, the framing is worker-centered and is focused on ensuring that academics have the "freedom within the law to question and test received wisdom and to put forward new ideas and controversial or unpopular opinions, without placing themselves in jeopardy of losing their jobs or privileges." For the University of Exeter, their discursive framing focuses more on the institutional responsibility of the university to

maintain and promote the academic freedom of all undertaking academic activities. That is to say freedom of education and discussion, freedom in carrying out research and disseminating and publishing the results thereof, freedom from institutional or other forms of censorship, and freedom to participate in professional or representative academic bodies.<sup>9</sup>

Within the context of how academic freedom is commonly constructed in UK university policies, academic freedom is not absolute and is often bounded by mediating factors. Taking the example of the University of Exeter, the operationalization of academic freedom within their institution is bounded by the university's corporate values and "the right of the University to make reasonable business decisions with regard to the provision of academic activities." Additionally, UK HE institutions tend to bind the limits of academic freedom in relation to government legislation such as the Equality Act and the Public Sector Equality Duty and also bind the operationalizing of academic freedom in relation to institutional equality, dignity, and respect policies, which often take precedence over academic

<sup>7</sup> See, e.g., University of Bath, "Academic Freedom," www.bath.ac.uk/corporate-information/academic-freedom; University of Exeter, "Agreement on Academic Freedom," www.exeter.ac.uk/staff/exeteracademic/yourdevelopment/citizenshipdevelopment/policies/academicfreedom; University of Nottingham, "Free Speech and Academic Freedom at the University of Nottingham," www.nottingham.ac.uk/governance/free-speech-and-academic-freedom.aspx.

<sup>8</sup> University of Nottingham, "Free Speech and Academic Freedom."

<sup>9</sup> University of Exeter, "Agreement on Academic Freedom."

<sup>10</sup> University of Exeter, "Agreement on Academic Freedom."

freedom in situations where the policies may clash.<sup>11</sup> From these institutional policies, which to some extent relate to the 2023 Higher Education (Freedom of Speech) Bill, three factors ought to be noted. First, the ways in which these policies are formulated frame institutional understandings of what academic freedom entails in broad terms. Second, the policies, conversely, take a more specific approach to specifying which institutional (business) aims take priority over academic freedom. Thirdly, what these policies leave unaddressed is the recognition of how institutions are themselves engaging in the everyday erosion of academic freedom through the ways in which the surveillance affordances of institutional digital technologies are being used to govern staff (in the Foucauldian sense) through performance management monitoring, creating hyper-competition, and policing quality. This will be discussed later.

To facilitate a systematic analysis of the impact of digital education governance on academic freedom, this chapter utilizes the comprehensive definition of academic freedom set out by Karran, Beiter, and Mallinson, which pinpoints academic freedom as comprising two substantive elements and three supportive elements.<sup>12</sup> As will be shown, within this characterization, the constituent ingredients of freedom for teaching and freedom for research are identified in terms of a number of precise liberties. This chapter also outlines the ways in which the growing culture of digital education governance in the UK HE system is undermining academic freedom.<sup>13</sup> The chapter specifically focuses on the freedom to teach. It sets out the ways in which digitally enabled forms of worker governance constitute a new, hitherto unrecognized, and underappreciated variable shaping academic freedom for UK-employed academics. Drawing on the open-text dataset from a survey of over two thousand academics working in UK universities, this chapter sets out how one of the most pressing threats to academic freedom at the current time comes from the intersection of digital technologies, HE marketization, and HE managerialism, with digital governance being the umbrella within which these forces come together in tandem as a coherent force. The chap-

<sup>11</sup> University of Bath, "Academic Freedom"; University of Exeter, "Agreement on Academic Freedom"; University of Nottingham, "Free Speech and Academic Freedom."

<sup>12</sup> Terence Karran, Klaus D. Beiter, and Lucy Mallinson, "Academic Freedom in Contemporary Britain: A Cause for Concern?" *Higher Education Quarterly* 76 (2021): 563.

<sup>13</sup> Williamson, "Digital Education Governance."

ter ends by highlighting the ways in which those who care about and value academic freedom can take proactive measures to protect academic freedom from the threats of digitally enabled managerialism. Next follows conceptual overviews of academic freedom and digital education governance.

### CONCEPTUALIZING ACADEMIC FREEDOM

Most informed observers, both within academia and in the broader HE policy environment, would agree that academic freedom is important, on several levels. First, academic freedom is an essential prerequisite for individual academics, in their roles as creators and disseminators of new knowledge; second, it is crucial to the successful functioning of universities; and thirdly, it has an important role in ensuring democratic accountability. Hence, Bergan and others contend that academic freedom is "essential for universities to produce the research and teaching necessary to improve the human condition, which involves developing and maintaining a democratic society." <sup>14</sup> Moreover, based on this latter role, Machlup argues that "academic freedom is a right of the people, not a privilege of a few." <sup>15</sup> Consequently, it is surprising to find that, despite the apparent importance of academic freedom to three critical stakeholder groups, there is a lack of definitional clarity surrounding the concept.

In his book on versions of academic freedom, Fish makes the point that "academic freedom is a contested concept." More helpfully, he sketches five distinct conceptualizations or "schools" of academic freedom, which he argues typify contemporary discourses about the topic. He labels these conceptualizations as follows: "It's Just a Job"; "For the Common Good"; "Academic Exceptionalism"; "It's for Critique"; and "Academic Freedom as Revolution." However, Menand's work suggests that such attempts by Fish (and others) rely on a "deeply misleading assumption ... of the university ... that there exists some unproblematic conception of academic freedom which

<sup>14</sup> Sjur Bergan, Tony Gallagher, and Ira Harkavy, "A Word from the Editors," in *Academic Freedom, Institutional Autonomy and the Future of Democracy*, ed. Sjur Bergan, Tony Gallagher, and Ira Harkavy (Strasbourg: Council of Europe, 2020), 8.

<sup>15</sup> Fritz Machlup, "On Some Misconceptions Concerning Academic Freedom," Bulletin of the American Association of University Professors 41 (1955): 753.

<sup>16</sup> Stanley Fish, Versions of Academic Freedom: From Professionalism to Revolution (Chicago: University of Chicago Press, 2014), 142.

is philosophically coherent and that will conduce to outcomes in particular cases which all parties will feel to be just and equitable." <sup>17</sup> Moreover, as Matei points out: "There is no blueprint of any kind for academic freedom." <sup>18</sup>

In addition, the greater use of digital technologies (especially the new generation of technologies associated with the so-called Fourth Industrial Revolution, such as digital technologies that are underpinned by big data sets and make use of artificial intelligence and machine learning algorithms to aid data-informed decision-making), both within society at large and especially within the HE function (which is the focus of this chapter), has increased (rather than reduced) the degree of obscurity surrounding academic freedom. Indeed, Lackey notes that "the increasing role of the Internet in research, the rise of social media in both professional and extramural exchanges, and student demands for accommodations such as content warnings and safe spaces, the parameters of, and challenges to, academic freedom often leave us in uncharted territory." 19 Responding to such trends led the American Association of University Professors to assert that "faculty members must participate, preferably through representative institutions of shared governance, in the formulation and implementation of policies governing electronic communications technologies."20

However, for the purposes of this analysis, rather than attempting to address these definitional problems (that are important, but maybe intractable), we have followed the approach adopted by Karran such that "rather than trying to find a conclusive epistemological needle in a philosophical haystack, [our] concern is to provide a preliminary generic statement that is sharp enough with which to sew together the essential elements of the concept" of academic freedom with reference to the threat imposed by digital governance.<sup>21</sup> Despite differences in emphasis, all of the major defin-

<sup>17</sup> Louis Menand, "The Limits of Academic Freedom," in *The Future of Academic Freedom*, ed. Louis Menand et al. (Chicago: Chicago University Press, 1996), 5.

<sup>18</sup> Liviu Matei, "Academic Freedom, University Autonomy and Democracy's Future in Europe," in Academic Freedom, Institutional Autonomy and the Future of Democracy, ed. Sjur Bergan, Tony Gallagher, and Ira Harkavy (Strasbourg: Council of Europe, 2020), 35.

<sup>19</sup> Jennifer Lackey, "Academic Freedom," in Academic Freedom, ed. Jennifer Lackey (Oxford: Oxford University Press, 2018), 19.

<sup>20</sup> AAUP, "Academic Freedom and Electronic Communications," *Bulletin of the American Association of University Professors* 100 (2014): 33.

<sup>21</sup> Terence Karran, "Academic Freedom in Europe: Time for a Magna Charta?" *Higher Education Policy* 22 (2009): 168.

ing international policy documents on academic freedom (e.g., AAUP's 1915 Declaration of Principles on Academic Freedom and Academic Tenure; CODESRIA's 1990 Dar es Salaam Declaration on Academic Freedom and Social Responsibility of Academics; Magna Charta Observatory's 1988 Magna Charta Universitatum; UNESCO's 1997 Recommendation on the Status of Higher Education Teaching Personnel; World University Service's 1988 Lima Declaration on Academic Freedom and the Autonomy of Institutions of Higher Education) identify the need for the substantive freedoms to teach and to undertake research. Similarly, analysis of the national constitutions and relevant legal instruments of the EU states demonstrates that the majority have some form of protection for academic freedom to teach or research.<sup>22</sup>

Drawing on both policy documents and constitutional and legislative instruments, Karran, Beiter, and Mallinson determined academic freedom to have five discrete constituent elements, two of which are substantive, and three of which are supportive.<sup>23</sup> The substantive elements are the freedom to teach and the freedom to research. The freedom to teach habitually includes the right to freely determine what shall be taught; how it shall be taught; who shall be allowed to study; who shall teach; how students' learning may be assessed and graded and who shall receive academic awards. The freedom to research normally includes the right to determine (without duress) what shall (or shall not) be researched; how it shall be researched; who shall research, with whom, and for what purpose research shall be pursued; the methods by which, and avenues through which, research findings shall be disseminated. The supportive elements are tenure, shared governance, and autonomy. Tenure takes the form of employment protection from dismissal awarded to academic staff following an independent and meticulous appraisal by their peers of their academic performance during a probationary period. To guarantee academic freedom, staff must have powers of governance including an equal right to voice their opinions on their institution's educational policies and priorities without the threat of punitive action and have a determinant voice and a prominent role in university decision-making processes along with

<sup>22</sup> Karran et al., "Academic Freedom in Contemporary Britain," 566.

<sup>23</sup> Karran et al., "Academic Freedom in Contemporary Britain."

the ability to appoint people into positions of managerial authority and hold them to periodic account by agreed democratic processes. Individual autonomy requires that academics can act as free agents in exercising their academic freedom rights, with respect to their professional activities of teaching, research, and shared governance without interference by internal or external individuals or bodies.

These three supportive elements acting in tandem are necessary for academic freedom, but each is individually insufficient for academic freedom to flourish. So, single elements are less individually important than the fact that they mesh together. Hence, where one supportive element falters, it undermines the other two, thereby weakening substantive academic freedom for research and teaching. Thus, if tenure is lacking (as is the case in the UK), academics may be unable to fully participate in shared governance and make objective decisions on, for example, subject teaching methods for fear of losing their jobs.

McCluskey and Winter demonstrate that "academic freedom is undergoing a great change ... colleges need to rethink academic freedom in light of these new technologies."24 However, when looking at the integration and embedding of digital technologies in HE, it is evident that its impact has thus far been greater with respect to university teaching in terms of reach (i.e., all key aspects of teaching delivery and teaching content consumption are impacted) and scope (both faculty and students are affected), rather than research, not least because the research function does not impact as directly on students as that of teaching (and, therefore, research is subject to marketization and consumer logic in a different range of ways). In addition, governmental restrictions brought in to contain the COVID-19 global pandemic (stay-at-home orders, social distancing in classrooms, discouraging nonessential traveling) accelerated the adoption of open and distance learning approaches in universities and led to universities increasing their investment in educational technologies to maintain continuity of teaching delivery and student learning. The use of such learning technologies has been commonplace in national open universities (e.g., the UK O.U., the German Fernuniversität, and the Spanish Universidad Nacional de Educación a

<sup>24</sup> Frank B. McCluskey and Melanie L. Winter, "Academic Freedom in the Digital Age," On the Horizon 22 (2014): 136.

Distancia) for many years, while "traditional" universities had only slowly been integrating some elements of technology-enhanced learning. The global pandemic forced a quantum leap in the scope, utilization, and sophistication of new technologically enhanced learning environments across the UK HE sector. Furthermore, the desire to ensure quality distance teaching during the pandemic engendered an interest in the use of these technologies to more closely monitor—for quality assurance purposes—the teaching activities of lecturers and the satisfaction levels of students. More recently, the 2023 Higher Education (Freedom of Speech) Act now requires HE providers to maintain a code of freedom of expression practices. Students are now able to make free speech complaints to the Office for Students (OfS the UK HE regulatory body) if they believe they have suffered adverse consequences with respect to the revocation of their freedom of speech rights within the classroom. To guard against such legal actions by the OfS, and to ensure that the academic freedom of staff and freedom of expression of students are not undermined, may feasibly require universities to start taking a more proactive approach to digital monitoring, archiving, and analyzing the aspects of teaching and staff-student communications that are captured electronically.

## CONCEPTUALIZING DIGITAL GOVERNANCE

The term digital education governance, coined by Williamson, seeks to characterize the complex multifaceted state of contemporary education systems and education institutions in the West, as the extended extract below details:

Contemporary education is increasingly organized through a densely networked apparatus of computer code, algorithms, database infrastructures, architectures, servers, platforms, and packages; it is managed through new data analytics and other digital platforms that enable the collection, cleaning, and connection of data; it is mediated through websites, data visualizations and graphical forms of communication; it is peopled by new kinds of experts in digital data analysis, knowledge production, and presentation; and it is located in particular institutions, organizations and communities with their technical ways of doing things,

scientific styles of thinking, professional subjectivities and objectives and aspirations.<sup>25</sup>

In essence, Williamson argues that "digital software technologies, data systems and the code and algorithms that enact them have become powerful yet largely hidden influences in the governing of education." Using Williamson's definition, this chapter details how the practices of digital education governance shape the nature of work in the UK HE system, specifically in relation to how academic freedom is experienced, enabled, and eroded.

An important precursor to the concept of digital education governance was Dunleavey and others' concept of digital era governance.<sup>27</sup> In their conceptualization, following the decline of New Public Management as the "dominant set of managerial and governance ideas of the last two decades" in the UK public sector, a new form of governance emerged that took forward many of the core ideas of New Public Management (disaggregation, competition, and incentivization) but also departed from these via digital technology-enabled changes that brought the promise of productivity benefits at scale via accelerated digitally driven organizational transformation.<sup>28</sup>

A key feature of both digital education governance and digital era governance is the affordances that digital transformation brings in terms of what is in the literature called either digital monitoring or surveillance.<sup>29</sup> The two terms are often used interchangeably as there is no clear-cut distinction between the two terms among researchers and practitioners, although sometimes digital monitoring is used to refer to less exploitative forms of digital surveillance.<sup>30</sup> Here, as the focus is on working conditions, the term digital surveillance will be used. In the marketized UK HE sector, digital surveillance can be a powerful tool for improving the consumer (student) experi-

<sup>25</sup> Williamson, "Digital Education Governance," 3.

<sup>26</sup> Williamson, "Digital Education Governance," 4.

<sup>27</sup> Patrick Dunleavy et al., "Public Management Is Dead—Long Live Digital-Era Governance," Journal of Public Administration Research and Theory 16 (2006): 467.

<sup>28</sup> Dunleavy et al., "Public Management Is Dead," 478.

<sup>29</sup> Sara Riso, "Monitoring and Surveillance of Workers in the digital Age," European Foundation for the Improvement of Living and Working Conditions, www.eurofound.europa.eu/data/digitalisation/research-digests/monitoring-and-surveillance-of-workers-in-the-digital-age.

<sup>30</sup> Riso, "Monitoring and Surveillance of Workers in the Digital Age."

ence. For example, learning analytics systems can help universities identify students at risk of dropping out or students with learning behavior correlating with poor performance (poor attendance at class, low engagement with learning materials) and then prompt faculty to make interventions that can decrease the likelihood of student dropout or increase the likelihood of student success.<sup>31</sup> Learning analytics can also help universities and tutors measure the effectiveness of different learner engagement strategies, which can then feed into institutional approaches to teaching and learning going forward.<sup>32</sup> However, digital surveillance systems and processes are often designed along business-centric or consumer-centric lines, which can mean that the surveillance regimes that they produce can work against the interests of the worker and worsen working conditions through increased worker stress and lower worker autonomy.<sup>33</sup>

A third related concept is that of digital HE.<sup>34</sup> Castañeda and Selwyn see the infusion of digital into HE as something that is furthering the neoliberalization of HE through "the reconfiguration of educational practices and relations into forms that can be quantified and exchanged; governance practices are increasingly directed by market rationales, supported and fostered by principles of international ranking based competition."<sup>35</sup> For Selwyn, one of the most visible manifestations of this is the increased use of online metrics, measurements, and "analytics" by universities to monitor, assess, and profile academic performance on multiple levels (that of their faculty, that of their subject, and on the individual level).<sup>36</sup>

Without digital HE, it is not possible for digital governance to take root.<sup>37</sup> In the context of academic freedom, digital HE brings both threats and

<sup>31</sup> Niall Sclater, Alice Peasgood, and Joel Mullan, "Learning Analytics in Higher Education: A Review of UK and International Practice," JISC, www.jisc.ac.uk/sites/default/files/learning-analytics-in-hev2 o.pdf.

<sup>32</sup> Sclater et al., "Learning Analytics in Higher Education."

<sup>33</sup> Trade Union Congress, "Technology Managing People: The Worker Experience," www.tuc.org.uk/sites/default/files/2020-11/Technology\_Managing\_People\_Report\_2020\_AW\_Optimised.pdf.

<sup>34</sup> Neil Selwyn, *Digital Technology and the Contemporary University: Degrees of Digitization* (London: Routledge, 2014).

<sup>35</sup> Linda Castañeda and Neil Selwyn, "More Than Tools? Making Sense of the Ongoing Digitizations of Higher Education," International Journal of Educational Technology in Higher Education 15 (2018): 6.

<sup>36</sup> Selwyn, Digital Technology and the Contemporary University.

<sup>37</sup> Selwyn, Digital Technology and the Contemporary University; Williamson, "Digital Education Governance."

opportunities.<sup>38</sup> For example, new innovative digitally enabled research methods create opportunities to conduct new kinds of research not hitherto possible or feasible.<sup>39</sup> With this can come new expectations of academic worker skills, performance, and output and repositioning of the esteem in which certain disciplines are held (e.g., high-tech agri-robotics research can become more fashionable and institutionally prioritized compared to language research using traditional research methods). On the other hand, digital governance, concerned as it is with improving how universities govern academic staff performance, brings threats to the status quo of academic freedom through its focus on continually furthering the layers of academic worker surveillance.40 After all, as Hare argues, technology is not neutral and should not be seen as neutral.41 For Hare, technology is best understood as being ideologically representative of the political and historical systems from which they emerged and it is worth considering whose ends they serve the most (e.g., institutionally implemented technologies chosen by university management, while bringing benefits for all, may have particular employer-employee power relation benefits for university management).42

# RESEARCH METHODOLOGY

This chapter draws on the open-text data gathered from a survey of the UK University and College Union (UCU) members into their views of how organizational digital technology has shaped their experiences of academic freedom. The survey comprised fifty-plus questions (mostly Likert-type questions) mapped to the key aspects of academic freedom detailed earlier. The UCU contributed to the survey design, in particular colleagues from the equality and policy teams. The survey comprised six sections. The first section sought demographic and employment information from respondents. The second section explored respondents' views on academic freedom and

<sup>38</sup> Selwyn, Digital Technology and the Contemporary University.

<sup>39</sup> For an overview of the University of Aberdeen's cutting-edge digital research case studies, see University of Aberdeen, "Enabling Discovery & Innovation | Digital Research," www.abdn.ac.uk/research/digital-research/index.php.

<sup>40</sup> Williamson, "Digital Education Governance."

<sup>41</sup> Stephanie Hare, Technology Is Not Neutral: A Short Guide to Technology (London: London Publishing Partnership, 2022).

<sup>42</sup> Hare, Technology Is Not Neutral.

digital technology. The third section looked at digital governance and academic freedom in teaching, while the fourth section explored digital governance and academic freedom in research. The fifth section explored the trajectory of digital governance, and the closing section looked at freedom of speech and academic freedom in the context of recent government legislation. Each of those sections predominantly comprised Likert-type questions, but all also contained two or more open-text questions. This chapter solely focuses on and utilizes the open-text responses related to teaching.

The survey was distributed to all UCU members in May 2021 via dedicated email bulletins and featured in the UCU weekly newsletter. The survey received more than 2,100 responses over four weeks and generated over 242,000 words of open-text data. The open-text data was then thematically analyzed and the data was allocated to predetermined analytical themes based on the definition of academic freedom elaborated by Karran, Beiter, and Mallinson. As discussed earlier, the Karran, Beiter, and Mallinson definition breaks down academic freedom into two substantive elements (which comprise multiple associated liberties) and three supportive elements.

# FINDINGS AND DISCUSSION

With the move in Western economies toward a digital society, there has been increasing digitalization of various aspects of life and a corresponding digitalization of work in general, including university academic work.<sup>44</sup> As a consequence of these changes, the variables that shape how academic freedom is operationalized, experienced, and takes form are also starting to take a digital turn and evolve.<sup>45</sup> For example, how universities direct, manage,

<sup>43</sup> Virginia Braun and Victoria Clarke, *Thematic Analysis: A Practical Guide* (London: Sage, 2022); Karran et al., "Academic Freedom in Contemporary Britain."

Department for Digital, Culture, Media & Sport, "Policy Paper: UK Digital Strategy," www.gov.uk/
government/publications/uks-digital-strategy/uk-digital-strategy; Jessamy Perriam, Understanding
Digital Societies (London: Sage, 2021); Adi Kuntsman and Esperanza Miyake, Paradoxes of Digital Disengagement: In Search of the Opt-Out Button (London: University of Westminster Press, 2022); Deborah Lupton, The Quantified Self: A Sociology of Self-Tracking (Cambridge: Polity Press, 2016); Phoebe V.
Moore, Pav Akhtar, and Martin Upchurch, "Digitalisation of Work and Resistance," in Humans and
Machines at Work: Dynamics of Virtual Work, ed. Phoebe V. Moore, Martin Upchurch, and Xanthe
Whittaker (Cham: Palgrave Macmillan, 2018), 17; Catherine Edelhard Tomte et al., "Digitalisation in
Higher Education: Mapping Institutional Approaches for Teaching and Learning," Quality in Higher
Education 25 (2019): 98.

<sup>45</sup> Selwyn, Digital Technology and the Contemporary University.

and evaluate staff is taking a digital turn. In the UK, within an ideological framework that privileges the belief that academics must be accountable for every hour of their time, universities use digital workloading systems to allocate how much time academics spend on teaching, research, and administration.<sup>46</sup> In addition to deprofessionalizing academic work, as the data below shows, this links to the levels of academic freedom one has as the workload an academic is allocated structurally shapes that academic's realistic level of achievement. With these changes come both new opportunities for academic freedom (such as enabling new modes of teaching and research) but also new threats to academic freedom (such as greater surveillance and accountability).

While some of these threats from digital governance can be overt and are well known (such as the impact of research metrics and rankings on the freedom to research), some of these threats are less perceptible. This can be because these threats functioning as an invisible technology of power whereby adverse consequences are experienced, but the causes are difficult to identify; or, alternately, because these threats do not represent a tangible threat to academic freedom at the current time, but rather they contain the seeds of potential threats that may fruition in the future (e.g., the employee surveillance potential of Microsoft Office's 365 is only being realized now despite Microsoft's Office product having been in wide use in the UK HE for more than two decades and has long contained untapped digital surveillance potential).<sup>47</sup> As such, the challenges that digital governance brings to academic freedom can be conceptualized in a number of ways. The section that follows maps the threats that digital governance poses to one of Karran, Beiter, and Mallinson's substantive elements of academic freedom—the freedom to teach.48

Freedom to teach is one of academic freedom's two substantive *elements* and comprises six associated liberties.<sup>49</sup> These are the freedom to determine what shall be taught (i.e., the determining of course content), the freedom to determine how the content shall be taught (i.e., pedagogic approach), the

<sup>46</sup> David Kernohan, "A Beginner's Guide to Academic Workload Modelling," Wonkhe, February 8, 2019, https://wonkhe.com/blogs/a-beginners-guide-to-academic-workload-modelling.

<sup>47</sup> Byung-Chul Han, Psychopolitics: Neoliberalism and New Technologies of Power (London: Verso, 2017).

<sup>48</sup> Karran et al., "Academic Freedom in Contemporary Britain."

<sup>49</sup> Karran et al., "Academic Freedom in Contemporary Britain."

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freedom to determine who shall teach (via transparent selection procedures), the freedom to determine whom shall be taught (the right to determine and enforce entry standards), the freedom to determine how students' progress shall be evaluated (assessment methods), and, finally, the freedom to determine whether students shall progress (via marking criteria and grade determination). Four of these associated liberties will be explored in depth: the determination of course content; the choice of pedagogical approach; the selection of assessment methods; and determining student grades based on expert academic judgment and disciplinary expertise.

# DIGITAL EDUCATION GOVERNANCE: THE DETERMINATION OF COURSE CONTENT AND PEDAGOGIC APPROACH

Recent years have seen an increase in more muscular quality assurance in the UK HE sector, with the launch of the Teaching Excellence Framework (TEF) in 2017, the creation of the OfS in 2018, and the impact that those two macro-changes have had within the meso-environments of universities (e.g., setting up of TEF teams, aligning institutional priorities to the new metrics) that faculty function in.50 Furthermore, with the pandemic-induced move in UK universities to emergency remote learning and the postpandemic new normal of universities maintaining an enlarged digital teaching and learning provision, there has been an increased public debate about the need to assure the quality of education that universities provide to students.<sup>51</sup> While, in principle, the focus on quality assurance in the UK HE sector undoubtedly brings a large number of benefits to the student experience (the raising of standards, the eradication of variability in quality levels, the reduction of randomness in teaching delivery, and the providing of students with a clear set of expectations to navigate), the ways in which quality assurance is operationalized in the contemporary UK university can be problematic. UK universities tend to take a highly managerial approach focused on prioritizing student (consumer) views over academic staff views while taking advantage of one of the key affordances of digital transformation: digital technology's

<sup>50</sup> Office for Students, "About," www.officeforstudents.org.uk/about/; Office for Students, "About the TEF," www.officeforstudents.org.uk/advice-and-guidance/teaching/about-the-tef/.

<sup>51</sup> Sir Michael Barber, Gravity Assist: Propelling Higher Education towards a Brighter Future: Digital Teaching and Learning Review (Bristol: Office for Students, 2021).

ability to enable a certain form of digital governance through easy en-masse comparing of one discipline against another using standardized across-the-board metrics. The impact of this on academics was reflected by a survey respondent who commented:

There has been a remarkable increase in Quality Assurance monitoring and reporting paperwork, in the past 10 years ... This work is time-consuming and not accounted for in workload planning, and it imposes a stultifying, bean-counting mentality on creative thought in teaching. Quality in teaching is driven by the ethical standards inherent to the disciplines and by the ethical standards we are raised with as social beings.

The same respondent further explained how the use of one-size-fits-all approaches facilitated by digital governance is leading to the inappropriate application of generic institution-wide quality standards:

The University is implementing a one-size-fits-all approach that fails to recognize the differences in subject areas, their varied content, modes of teaching, resources, and the like. This is only possible because of the move to online systems. It is not the online systems per se, but the fact that now the efficiencies of e.g., life sciences, are evaluated against the efficiencies of philosophy, which they never used to be.

Additionally, survey respondents recognized both how quality processes are necessary in order to raise standards and also how, in order to meet their quality enhancement and quality assurance goals, university management can take an unnecessarily strong focus on enforcing standardization through increasing digital surveillance and monitoring. Another survey respondent stated:

Academic freedom in teaching has diminished. Academics are no longer able to mark and deliver teaching exactly how they want to, but that's not necessarily always a bad thing. Some people have never cared about teaching and delivered very low-quality teaching. Being able to hold them accountable for poor performance is a good thing.

However, some survey respondents identified how one consequence of this increasingly forceful quality assurance monitoring has been to empower certain individuals who misuse their newly acquired power. For example, one respondent reported: "Some people can abuse power to make me work harder as a form of institutional bullying. Monitoring is healthy and necessary as long as it is used for good (learning, improvement, etc) and not bad (damaging probation, creating an intentionally bad reputation, etc)."

Furthermore, the data gathered by the survey showed that digital education governance impacts the "what shall be taught" element of academic freedom in a number of important ways. These can be conceptualized as university management exerting two types of pressure on staff, namely hard pressures and soft pressures. Hard pressures constitute institutional practices, such as staff with quality leadership responsibilities making use of their enhanced privileged access to digital systems to overtly and covertly inspect online course sites (i.e., Virtual Learning Environment [VLE] or Learning Management System [LMS] course sites on platforms such as Blackboard, Moodle, and Canvas) and to score VLE course sites against specific pedagogical criteria. One survey respondent reported:

We've appointed an admin role to a colleague (pity them!) whose time is being wasted by checking everyone's [VLE] pages to make sure that they meet with the university-mandated template (photo on the front page of lecturers' webpages, with a welcome message, etc.). I can see a change not far off where this job is taken by someone who has a strong sense that every module (and not just their pages) should be uniform.

To understand why UK universities now closely monitor some of the perhaps more mundane aspects of academic work, it is important to understand the move toward standardization in UK universities and how this intersects with institutional spending on expensive technologies and the need for an institution to evidence a return on investment for their technology spend, as the same respondent elaborated:

The university has regularized all assessment structures to a single template, and because this has led to student "dissatisfaction," now pressures academics to make "full use" of the potential to use the [VLE] for dis-

cussions/quizzes, etc., however inappropriate to the content/learning outcomes. I think it's because they've invested so much money in the platform that they now need to prove to everyone that it's making a measurable "difference"; it's all very top-down, [with] edicts and memos from on high.

As the survey respondent's quote above demonstrates, part of the threat from digital surveillance comes from academics having the awareness that their VLE course may be inspected at any time and that they may get sanctioned as a result. This potential of being inspected at any time during the term can act as a deterrent (i.e., it can deter academics from noncompliant behaviors). This illustrates how the move toward digital transformation by universities has brought the affordances of surveillance capitalism to the HE sector, specifically to the micro-environment of a university workplace, and more specifically to university management.<sup>52</sup> Zuboff defines surveillance capitalism as a system that makes use of surveilled human experience for capitalistic ends (i.e., in the case of a university, to make use of surveilled data for more comprehensive employee performance management or to more closely monitor employee adherence to institutional goals).<sup>53</sup> A key feature of surveillance capitalism is what Zuboff labels instrumentation power, namely, the engineering of behavior through the act of surveillance and the use of surveillance data.<sup>54</sup> Instrumentation power allows certain managerial practices such as the one detailed by this respondent below—to happen without staff having recourse to means with which to effectively push back or prevent:

Up until recently, we have had the freedom to manage the curriculum and make use of the metrics that are taken to develop our teaching. However, during the pandemic (and possibly just before), these freedoms have been eroded and decisions are being made outside of our program that have a big impact on the content and teaching of the program.

<sup>52</sup> Shoshana Zuboff, The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power (London: Profile Books, 2018).

<sup>53</sup> Zuboff, The Age of Surveillance Capitalism.

<sup>54</sup> Zuboff, The Age of Surveillance Capitalism.

The "freedom to determine pedagogy" aspect of academic freedom is also under threat from digital governance. Two specific aspects of the digital university pose threats to this freedom. The first threat comes from the move in the UK HE sector to the increased normalization of online or hybrid delivery.55 This aspect will not be analyzed here, as on-campus teaching was the predominant focus of the research instrument. The second threat to the freedom to "determine pedagogy" comes from the omnipresence of lecture capture technology in the UK HE sector. As a consequence of the widespread adoption of lecture capture technology and the associated institutional policies governing its use, the university lecture is increasingly becoming less of a time-bound geographically located private experience between the teacher and those being taught (i.e., a lecture that takes place at a certain time in a specific building and that is experienced in real time by those present). Instead, through the use of lecture recording and hybrid delivery, a lecture is becoming an event that is often recorded and can be rewatched outside of its original context including by those not present, and the content covered can be used to discipline academic staff should hard evidence be needed to back up a student claim (e.g., around a microaggression or views given in relation to something politically sensitive).

In the UK HE sector, Panopto and Echo 360 are the two main lecture recording systems in use. <sup>56</sup> Panopto and Echo 360 both enable the normalization of lecture recording across a university by either allowing staff to manually record their sessions or for the institution to automate the recordings centrally (without staff needing to configure anything). <sup>57</sup> The recordings can then have captions either manually added or added via an AI caption service. Additionally, statistical records are kept of each lecturer's engagement with the system as well as student engagement with individual videos, and videos on a module and program level. <sup>58</sup> Whether academics choose to engage with lecture recording systems tends to be shaped by two factors. One is whether the institutional policy on lecture record-

<sup>55</sup> Barber, Gravity Assist.

<sup>56</sup> Panopto, "Remote Video Recording," www.panopto.com/features/video-recording/remote-recording/; Echo 360, "Learning, Inspired," https://echo360.com; UCISA, "Technology Enhanced Learning Pulse Survey," www.ucisa.ac.uk/News-and-Blogs/News/2022/November/~/link.aspx?\_id=5326446 515804E10A0E53E7B964115AD&\_z=z.

<sup>57</sup> Panopto, "Remote Video Recording"; Echo 360, "Learning, Inspired."

<sup>58</sup> Panopto, "Remote Video Recording"; Echo 360, "Learning, Inspired."

ing specifies de facto mandatory recording. This tends to be done via the use of a lecturer "opt-out" policy framing, which is sometimes combined with automated recording of teaching sessions based on timetable system information. <sup>59</sup> When lecture recording is institutionally embedded in this way, it can become culturally difficult for academics to opt out. Two is whether the institutional policy specifies lecturer "opt-in." In opt-in systems, the use of lecture recording tends to be lower as use is not forced but rather an individual autonomy decision.

As organizational norms shift to teaching sessions being recorded as the cultural default through lecture capture technologies, a number of facets of how university teaching is delivered are changing. Firstly, the style of delivery is evolving. Being recorded without a lecturer's explicit opt-in can impact the freedom with which a lecturer delivers their lectures, and this reduced sense of autonomy can impact how much satisfaction a lecturer gets from their teaching, as this respondent details: "The recording of lectures is particularly problematic. Observed behavior changes behavior and adds another layer of emotional stress. It is impossible to be oneself when being recorded and sadly that has removed the sense of fun/enjoyment from my teaching interactions."

Compounding this, the very fact of a session being recorded can also impact students' engagement in class: "We now have compulsory lecture capture and this will severely limit the nature and atmosphere of the lecture, and the engagement of the students within this forum." In terms of power relations at work, the forcing of lecture recording can also shift some power away from the lecturer and to the student and lead to increased student-as-consumer behavior, as one respondent declared: "I feel constantly watched. In the past, if I made a mistake while explaining something during a live lecture it would either go noticed by students and have no impact on their learning (if the slide contains correct info). Now some students are constantly picking on tiny errors lecturers make because they can review a recording."

Manchester Metropolitan University, "Policy on Lecture Capture," www.mmu.ac.uk/media/mmuacuk/content/documents/information-systems/help-guides/DRAFT-Lecture-Capture-Policy. pdf; University of Edinburgh, "Lecture Recording Policy," www.ed.ac.uk/information-services/learning-technology/media-hopper-replay/help-and-support/frequently-asked-questions/lecture-recording-policy.

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Furthermore, as well as empowering students in certain ways, mandatory lecture recording can also empower university management in new ways by providing them with additional sources of information (evidence) that can be (mis)used against staff years into the future, leading one respondent to comment:

The recording and uploading of my lectures means that I have to approach with more caution in case what I am talking about is taken out of context as I am not there to clarify what I mean. This restricts the kinds of topics I am willing to cover because I'm anxious about how the recording will be read or received in the future.

As the respondent above shows, the use of lecture recording technology can be key in shaping how some aspects of academic freedom are operationalized. Lecturers can feel more self-conscious when teaching and fearful that any mistakes made in the normal course of delivering a lecture may be used against them in the future by either students or management. Hence teaching staff can feel pressured to deliver sessions in a more conservative way in order to reduce the risk of having a mistake that would otherwise be of little consequence captured on film. In addition, the use of lecture capture technology impacts where a lecturer stands during a lecture (e.g., the lecturer ought to stand closer to the podium in order for the microphone to capture their voice optimally), the lecturer's teaching style (more didactic as this mode of delivery lends itself better to lecture capture), and audience engagement (students may feel self-conscious about having their voice or questions captured on recordings and so reduce the kind of student engagement that would be captured in the recording).

# THE IMPACT OF DIGITAL EDUCATION GOVERNANCE ON ASSESSMENT AND GRADING

In a contemporary UK university, the use of centralized digital student information systems (SIS) and data warehouses has facilitated new forms of management practice based on institution-wide real-time surveillance of key student performance metrics, including student grades. While ostensibly the surveillance that SIS and university data warehouses provide is of stu-

dent behavior (e.g., attendance at timetabled events, visits to the university library, engagement with support services), performance (grades), and outcomes, poor student performance is often seen as the responsibility of the teaching staff and solely as a consequence of bad teaching or poor support. Thus, one respondent declared: "I feel we are pressured to have particular pass rates irrespective of student performance and that poor student performance is viewed as a failing on our part rather than a joint failure." In this way, SIS and data warehouses also become tools with which university leaders create new layers of academic worker performance to manage.

One of the most popular SIS in the UK HE sector is Tribal's Strategic Information Technology Services (SITS: Vision) system.<sup>60</sup> Tribal Group's system provides universities with a sophisticated data infrastructure that connects their VLE (e.g., Blackboard, Moodle, Canvas) and other systems to Tribal Group's SIS, with the explicit aim to "transform the way staff collects, collate, analyze, share and act on information."<sup>61</sup> The system is able to map the contours of an individual student's experience at university via various data points, and the data gathered can be used in real time to identify atrisk students and determine interventions to shape student outcomes.

Many UK universities have now set up planning and business intelligence teams and maintain data warehouses to power institution-wide data-informed decision-making. The University of St. Andrews' data warehouse "contains data taken from multiple source systems ... so that means it contains data about students, staff, accommodation, finance, our estate, etc." The University of Edinburgh's data warehouse works similarly: "The Data Warehouse is a central repository of data for reports and dashboards that combine data from across the University and/or which show trends over time ... You can use the data from the Warehouse to write reports or create dashboards of strategic information."

<sup>60</sup> Tribal Group, "SITS-Vision," www.tribalgroup.com/solutions/student-information-systems/sits-vision.

<sup>61</sup> Tribal Group, "SITS-Vision."

<sup>62</sup> See, e.g., Glasgow Caledonian University, "Strategy, Planning and Business Intelligence," www.gcu. ac.uk/aboutgcu/supportservices/strategyplanningandbusinessintelligence; University of Manchester, "Business Intelligence," www.staffnet.manchester.ac.uk/planning/bi/; University of Bristol, "Strategic Planning," www.bristol.ac.uk/planning/strategicplanning/.

<sup>63</sup> University of St Andrews, "Data Warehouse," www.st-andrews.ac.uk/staff/tech/datawarehouse/.

<sup>64</sup> University of Edinburgh, "Data Warehouse," www.ed.ac.uk/information-services/enterprise-architecture/university-data/data-warehouse.

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While these systems can provide rich business intelligence that enables better student support, improved student outcomes, and a richer student experience, as well as an institution-wide view of key metrics (mean grades, grade point average, number of fails, percentage of fails, etc.), they also usher in more data-driven ways of working and managing faculty. Specifically, they enable great managerial surveillance of academic work, which can encroach on academic autonomy with respect to the *academic freedom to determine student progression* (via the creation of marking criteria and determining grades) and *the freedom to determine how students' progress shall be evaluated* (through the selection of appropriate assessment methods). Universities, in particular, have dedicated significant attention to digital monitoring of student grade performance, partly due to pressure from the OfS to monitor grades more actively.<sup>65</sup>

The affordances of such tools can—in the context of the marketized UK HE sector and where student satisfaction has such great import and universities rely on student fees to stay solvent 66—manifest in surveillance practices that lead to artificial grade inflation, as demonstrated in the two quotes below from respondents:

I have noticed grade inflation in colleagues and a preponderance of passing students on the borderline of failing because it creates less hassle ultimately and the University will find a way to pass students. Also, because fee-paying students can now see pass rates, they will opt for higher ones this provides an external driver to pass more so courses are maintained rather than shut down. This is another form of monitoring interacting with students becoming fee-paying. Fees are one of the worst things to happen to universities.

Since NSS and COVID-19, academic work is now about satisfying students and telling them what they need to learn ... the focus is on helping

<sup>65</sup> Simon Baker, "Marking Boundaries and Algorithms Shift in Grade Inflation Row," Times Higher Education, February 3, 2021, www.timeshighereducation.com/news/marking-boundaries-and-algorithms-shift-gradeinflation-row.

<sup>66</sup> University of Southampton, "Rankings and Reputation," www.southampton.ac.uk/about/rankings-reputation; Thomas Weston, "In Focus: Financial Pressures on Higher Education," House of Lords Library, March 21, 2023, https://lordslibrary.parliament.uk/financial-pressures-on-higher-education/.

them to know what is being assessed ... It is about giving students high marks now and why grade inflation is the norm.

In essence, as the above quotes show, the combination of HE marketization, repositioning of students as consumers, and digital education governance intersects in a complex range of ways that impact various aspects of an academic's individual autonomy (e.g., marking student work is no longer just about marking student work; academics can feel a pressure to give higher marks and a need to consider the impact of their actions on future student recruitment numbers when simply trying to mark student work fairly).

Respondents attributed this erosion of academic freedom to the form of UK HE marketization that the current marriage of HE managerialism and digital technologies enables, as the below two respondents remarked:

My employer seems to have lost interest in academic standards. My employer is very keen on grade inflation. My employer does not care about some forms of academic misconduct by students. My employer is focused on generating income by getting and retaining as many students as possible.

Over a number of years, [my institution] has implemented different ways of uplifting marks, in a way that bears no relation to academic standards or the evaluation of work made by module teams. It has also resulted in grade inflation, ... and runs counter to the principles of academic freedom.

The data gathered also indicated that academics' abilities to assert their academic freedom and resist institutional pressure are dependent on a range of factors such as age, experience, and role seniority. As one respondent commented: "There are pressures for grade inflation and they will work through [the institution], so younger lecturers will award higher marks than more senior colleagues."

Grade inflation is indeed a significant problem in the UK HE sector and is a symptom of the dysfunctional behavior that a marketized HE sector incentivizes.<sup>67</sup> For example, the percentage of degrees classified as first-

<sup>67</sup> Susan Lapworth, "Getting to Grips with Grade Inflation," Office for Students, July 11, 2019, www.office-forstudents.org.uk/news-blog-and-events/blog/getting-to-grips-with-grade-inflation.

class honor at the University of Surrey rose from 22.0 percent in 2010–11 to 50.1 percent in 2016–17.<sup>68</sup> The OfS has multiple times spoken out against grade inflation, warning that the UK HE sector needs to be more reliable in degree standards over time (and between institutions) and that the current situation of grade inflation risks devaluing UK university degrees in the eyes of employers.<sup>69</sup> The combination of digital surveillance practices, marketization incentives, and universities' customer orientation has led to the eroding of academic freedom in the area of student assessment, a poorer academic worker experience, and, in some respects, an inferior student experience as academic staff feel "pressure to grade higher ... trend towards blander feedback to students, pressure to adjust assessment in order to meet targets and workload allocations."

Greater institutional surveillance and monitoring have also led to institutions encouraging cultural conservatism in assessment design. As one respondent noted: "Currently the main issue with academic freedom in teaching is poorly thought out overriding institutional choices (by managers) especially restrictions on assessment types." To enforce these new regimes, as another respondent commented: "Managers use 'student voice' and spurious evidential claims to manipulate academics into complying with their demands."

Some respondents were clear in attributing these changes in their working conditions to broader societal evolutions and the ideology underpinning recent government reform: "Many of these changes are the result of the marketization of higher education and the pressures from government and the OfS. Monitoring and surveillance processes are a direct response to these pressures." The combination of this cultural drive to standardize assessment along with the UK HE sector's intense focus on specific forms of quality assurance has also led to the creation of new structures of bureaucracy for academics to navigate, the kind of bureaucracy that can be stifling for individual autonomy and discourage the assertation of academic freedom. One respondent commented: "There is very little leeway to change the module content and assessment. Any module review/change request has to

<sup>68</sup> Sarah Harris, "Number of Students Getting First Class Degrees Sky-Rockets as Universities Are Accused of Grade Inflation: Making 'Desmond' (2.2 Awards) Almost Extinct," *Daily Mail*, December 18, 2018, www.dailymail.co.uk/news/article-6510157/Number-students-getting-class-degrees-sky-rockets.html.

<sup>69</sup> Lapworth, "Getting to Grips with Grade Inflation."

go through a time-consuming bureaucratic process. Whatever the change, it could be rejected depending on who you are. It is all politics and nepotism to the core."

In the extended quote below, another respondent echoed these sentiments:

Academic freedom in teaching has been declining as a result of increased centralized administrative control through so-called quality processes. Module design, including content, teaching methods, assessment structure, etc., goes through a lengthy process and approval by college committees—as does any subsequent change to a module. This stifles creativity in designing and delivering teaching and reduces tutors' ability to adapt and respond flexibly to the needs of students in an individual cohort. There is very little autonomy when it comes to setting assessments, for example, and none when it comes to the administration of marks.

As the quote above details, centralized quality teams are becoming increasingly forceful in shaping not just the broad work of academics but also increasingly pedagogic activities on the micro level. This, as respondent data shows, is an academic freedom issue as it is impacting institutional autonomy.

Although making changes to module assessment now requires the buyin of a greater range of colleagues, this was not seen as stifling by all respondents. Respondent data indicated that the influence of some colleagues (such as those in their team or of fellow disciplinary academics) was welcomed more than that of certain categories of others (such as those from central teams or nonacademics).

To me, academic freedom to make choices regarding course content, grading, assessment type, etc., means not absolute individual freedom, but freedom for decisions to be reached consensually by academics in the same Faculty/Department, prioritizing the benefit to students, without interference from administrators, and without pressure for conformity between different subjects. The pandemic has increased the workload and has increased opportunities for monitoring. The latter has both positive and negative aspects, depending on how it's used.

As the data above shows, the digital transformation of the UK HE sector has enabled greater institutional oversight and employee surveillance in a form that furthers the marketization of the UK HE sector, strengthens student (consumer) interests, and erodes academic autonomy in particular and highly specific ways.

#### Conclusion

Drawing on respondent data gathered from a survey of UCU members, this chapter has shown how the digital transformation of UK universities has led to significant changes in academic worker autonomy, and this chapter has detailed some of the ways in which employer-implemented technology has altered power relations across campuses and eroded academic freedom. One overt manifestation is in how digital technologies enable greater employee surveillance and better performance analytics potential. These combine to create new areas of knowledge asymmetry between university management and university workers and lead to new incentive and disincentive structures that can help align worker behavior with organizational objectives. Unsurprisingly, the two primary beneficiaries of digital transformation in the capitalist marketized UK HE system are university management and students (i.e., the consumers of the HE product provided by UK universities).

To prevent further erosion of academic freedom in teaching, there is a need in the UK academy for more muscular pushback and intelligent resistance against digital surveillance. A range of collective and individual tactics are required for this resistance to be effective. For individual academics, there is a foundational need to better appreciate digital technologies' role in shaping one's autonomy at work and one's role in power structures at work along the dimensions discussed in this chapter. For academic unions, there is a need to raise awareness among members of digital technology being a key variable in determining working conditions and for members to be actively aware of the nature of the threats to individual autonomy from digital technology. The UK is seen as a global leader in HE and is considered to have the second strongest education system in the world and the strongest in Europe, and the ways in which the UK HE sector develops tend to be reproduced in other countries (e.g., the Research Excellence Framework as a mecha-

nism for distributing governmental research funds has been replicated in a number of other nations). 7° As such, while this chapter focuses only on the UK HE sector, much of the analysis may also be applicable to the HE system in other highly developed nations, especially those countries whose governments have sought to marketize their HE sector along UK lines and are now embracing the digitally driven transformation of the HE sector. There is a need for research exploring further the impact of institutionally implemented technology on managerial practices in universities as well as digitally enabled quality assurance processes and the relationship between these and academic freedom.

<sup>70</sup> Quacquarelli Symonds, "The Strongest Higher Education Systems by Country," www.qs.com/thestrongest-higher-education-systems-by-country-overview/.