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Behind the platforms:

Safeguarding intellectual property rights and academic freedom in Higher Education

Janja Komljenovic and Ben Williamson

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Key concepts

Academic freedom: Academic freedom refers to the freedom to conduct inquiry and produce knowledge. It includes the freedom to make autonomous choices about teaching, such as decisions relating to content, pedagogy, evaluation and assessment.

Analytics: Digital education services collect large amounts of data requiring processing and analysis. Educational data analytics and learning analytics refer to software that is used to analyse and generate insights from educational data. Some forms of analytics have predictive capacities and are used by institutions to, for example, predict student outcomes. Companies can also use user analytics to generate insights into educational technology usage, often for further product development.

Artificial intelligence (AI): Artificial intelligence is a general term referring to a wide range of computational operations and applications that can process digital data and generate an automated response. In HE, the term AI may refer to descriptive and predictive analytics and, particularly since 2022, to 'generative AI' applications that can automatically produce content or materials in response to a user prompt or query. Very large digital infrastructure operators like Microsoft, Google and Amazon provide AI functionality for various education platformzoo operators and institutions.

Assetisation: Assetisation refers to a techno-legal-economic approach to generate value from the ownership and control of assets. In the case of digital platforms, asset controllers provide access to digital services through subscriptions and ongoing fees rather than selling commodities to customers. Digital platforms can be updated continuously, also benefitting from data recorded about their use, permitting their owners to enhance product development. Digital data are valuable assets for purposes of product analysis and development.

Big Tech: Big Tech commonly refers to the biggest and most valuable multinational technology companies, such as Amazon, Google and Microsoft, whose technology services are used across a variety of industries and sectors, including education. Big Tech companies provide the infrastructure services required by many universities, like cloud computing facilities, data storage, network, operating systems and AI services. They also often provide their own educational platform services.

Edtech: Edtech refers to educational technologies and encompasses a wide variety of digital products, services and applications. It can also refer

to the edtech industry, consisting of both commercial and not-for-profit organisations that build and provide educational technologies. In this report, we refer to edtech platforms used in different aspects of teaching, learning, assessment, and content sharing. We focus on proprietary platforms offered by for-profit companies.

Infrastructure: Digital infrastructure refers to the underlying computing and network systems that enable institutions to outsource storage and other core IT functions. It includes global cloud providers, such as Microsoft, Google and Amazon Web Services, and national research and education networks (NRENs), which provide universities with network connectivity to the internet and each other and also act as national-level brokers between large technology providers and institutions. Infrastructure is the basis for various applications to connect to an ecosystem. Many educational platforms depend on commercial infrastructure to operate.

Intellectual property (IP): Intellectual property refers to ownership and follow-through rights over one's own creations or over the creations of others if rights have been bought from a previous owner. IP is legally protected, with patents, trademarks and copyrights all being forms of IP protection.

Learning management systems (LMS): Learning management systems, similar to virtual learning environments (VLEs), are large software applications normally utilized across an entire institution for hosting courses, teaching materials and assessments online. Operating as platforms, they enable the collection of extensive user data. Most LMS operators are big global multinational businesses, with the market led by the Blackboard LMS provided by Anthology and Canvas offered by Instructure. They operate a business model of charging subscription fees to educational institutions.

Massive open online courses (MOOCs): MOOCs are platforms hosting individual courses online, developed by academics, higher education institutions, or other organisations, which also collect large volumes of data about user activity. They are offered as a form of supplementary training or as an alternative to conventional degree courses. Most well-known providers include Coursera, FutureLearn and edX. In some cases, MOOC vendors have moved towards providing entire degree content in partnership with universities and operate similarly to online program managers (OPMs).

Online program managers (OPMs): Online program managers provide platforms and other services for universities to run online short courses or entire degree programs. They operate on a revenue-sharing partnership basis where a proportion of student fees are paid to the OPM provider, or a pay-per-service model. They collect extensive data that can be used by

institutions or for product development. Major OPM operators include 2U, Wiley, and Higher Ed Partners.

Personal data: Personal data are digital forms of information that can directly identify an individual, such as their name, demographic information, records of assessment, and any other personally identifying information.

Platforms: Digital platforms are internet-based foundations for applications that can be modified and extended (in contrast to standalone software applications), and often facilitate various forms of interaction and sharing of user-generated content. In higher education, they range from large-scale services like institution-wide LMS, to online degree and course provision, to more specific functions, including content and media repositories, and assessment-related services. Platforms collect user data continuously, which may be used to analyse product usage and develop further functionality. 'Platformisation' refers to the process of universities running their operations on platforms and reorganising their practices to fit the infrastructure/platform.

Terms of service: Terms of service (also known as terms and conditions or terms of use) are a legal agreement between the provider of a service and its users. The user must agree to these terms to use the service. In the university context, terms of service operate as contractual agreements between education technology providers and institutions, which include actions of individuals as end users, such as academics and students.

User data: User data is a broad category that includes personal data and other information about users' activities and interactions on a digital platform. Privacy regulations do not protect non-personal user data. User data may be processed for various forms of analysis and become a source of value for education technology operators as they can be used for further product development or as the basis for a company's market valuation.

Acronyms

AI	*artificial intelligence*
HE	*higher education*
Edtech	*educational technology*
IP	*intellectual property*
LMS	*learning management system*
MOOC	*massive open online course*
OPM	*online programme management*
VLE	*virtual learning environment*

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1. Summary

Higher education (HE) faces a complex landscape of digital technology services, shaping educators' labour and working conditions in new ways. Two particular issues are ownership of intellectual property (IP) and academic freedom when using digital education services such as edtech platforms. Edtech platforms complicate questions of academic ownership of content and teaching materials, and can impact educators' academic freedom in teaching.

Educators' IP rights are affected by copyright arrangements that vary considerably in different international contexts. Many academics retain IP when posting content on a digital education service, but in other contexts, copyright for digital content may be claimed by their employer institutions. In some contexts, edtech platforms seek IP rights over academic content for delivering their service (for example, plagiarism detection or sharing student notes). They can also claim control of some user data produced through the service, which they may use for product development purposes. The licenses and contractual arrangements between institutions and vendors are essential in governing IP ownership and shaping academics' freedom to teach.

Digital education platforms may treat user content and data as valuable assets for potential profit-making. Uploaded content and data records of activity on a service can be used to support further product development, which may then be offered to institutions or individuals for a higher subscription or similar fee. An economic logic that treats educational materials and data as digital assets with potential financial value is in tension with core values of academic ownership and freedom, and open access to educational resources.

The headline finding of this study is that the increasing digitalisation and 'platformisation' of HE is resulting in a complex, messy combination of technical, legal and financial factors relating to academic IP and academic freedom, which are often complicated further by different governance and copyright regimes across national borders and individual institutions.

As a result, responses to issues of academic IP and academic freedom in digital education are fragmented, with no sector-wide standards or rules, and minimal guidance for institutions on these matters when engaging in licensing or procurement of digital education services, or staff when engaging in sector discussions/negotiations. The introduction of edtech platforms into universities shapes new kinds of practices, which may become normalised, though often without democratic discussion or scrutiny within the sector. This raises the risk that academic IP may be exploited, and academic

freedom constrained by HE institutions, edtech companies, or both, as digital platforms occupy an increasing role in HE systems. The report details three key sets of issues and challenges.

Academic content

Edtech platform operators do not typically claim ownership of academic content posted to an online service. However, IP ownership arrangements differ internationally, with academics retaining their IP in some contexts; in others, HE institutions claim ownership over materials for purposes such as IP exploitation and revenue sharing. Platform services can also enable individuals to share academics' IP without their permission, leading to enforcing takedown notices for content that violates their terms. While academics or institutions usually retain IP ownership and licence over content, platform companies sometimes take license over content to help deliver or improve particular services. Moreover, it can be difficult for academics or employers to withdraw their content or material after it has been posted on the platform. These developments raise three key challenges:

- A digital operator or an HE institution may change its practices concerning IP over content, requiring academics' vigilance and collective action to protect ownership rights.
- HE institutions that own copyright over academic content posted on a digital service can treat it as an asset from which they can generate value, potentially licensing educators' IP to other institutions for a fee without compensation to the original creator.
- Complex copyright issues are placing new demands on academic educators and HE administrators to protect individual and institutional IP, including addressing new legal problems such as copyright infringement.

User data

Digital platforms collect substantial quantities of user data from universities. HE institutions typically decide which data a platform vendor can collect and for what purposes it can be processed, usually governed by contracts between vendors and institutions, institutional privacy policies, data protection impact assessments, and legitimate interest tests. These legal arrangements make it difficult for staff or students to ascertain how their data is collected or processed. Beyond personal data, platform operators may control and ownership over user data. User activity can be used for product improvements and development. Companies may retain such data indefinitely. As such, edtech platforms amass data as assets for commercial benefit from the labour and activities of university academics

and students. This raises three key challenges:

- Edtech platform operators can retain user data for unknown future purposes, practices and strategies, as the data are treated as high-value assets with potential profit-making prospects.
- Digital data can be put to unknown future uses and unspecific purposes, including product and feature development, with the user data in particular retained by the platform proprietor as a valuable IP asset for ongoing analysis and potential feature or product development.
- User activity data can be used for purposes such as the surveillance of academic labour by institutions or other monitoring purposes by accrediting bodies and policy officials for the evaluation of outcomes.

Academic freedom

Issues of ownership and control of both content IP and data affect academic freedom in teaching by shaping academic decision-making related to content, pedagogy, evaluation and assessment. Academics often have limited choice over the digital services their institutions procure and constrained options to opt-out. In other cases, due to demanding workloads, academics are willing to outsource their labour to providers of online textbooks, courseware and assessment technologies, with edtech vendors offering highly standardised packages and/or licensed packages of partner courses and content. AI applications have begun to appear that enable course structure, quizzes, and assessments to be produced automatically, while edtech companies market analytics functionality as being able to prompt students and intervene in their studies, potentially challenging academic control over content and assessment. Edtech platforms, therefore, introduce new challenges for academic freedom in teaching, potentially even constraining or impeding certain pedagogic actions or decisions. These developments raise four key challenges:

- Outsourced content and automated services challenge educators' professional pedagogic autonomy to decide what and how they teach.
- Edtech platform providers can constrain institutional autonomy, challenging the right of universities to determine institutional matters such as the structure, content and form of teaching.
- Academic freedom can be restricted by HE institutions being locked into complex arrangements of platforms and infrastructures that are impossible to exit without extremely high switching costs.
- Academics are often locked out of critical conversations about procurement of services, despite the potential of those services to affect their academic freedom and labour, while

new technical, legal and contractual experts responsible for digital strategy may not recognise the impact of platforms and infrastructures on academic work and freedom.

Recommendations

Our recommendations to address these issues are:

- Further research should be conducted into specific national and regional issues related to digital technologies, IP and academic freedom in HE, with the aim of identifying specific contextual problems and potential good practice models that could be emulated in other contexts. Such research should focus on the key challenges identified in this report:
  - academic IP rights over content on platforms
  - the specific purposes for which edtech platforms collect user data
  - the implications of platforms for academic freedom in teaching
- Sector bodies, such as national research and education networks and regulatory organizations, should consult on creating standard quality assurance processes for procuring edtech platforms. Such consultations should involve experts with relevant expertise:
  - ethical procurement practice
  - quality assurance
  - vendor management strategy
- Universities should be more transparent in the agreement of contracts with digital education service providers, routinely publishing summaries of platform agreements in an accessible way for staff and students. This would include institutional transparency in terms of:
  - specific IP rights of staff
  - the IP claimed by institutions using the services
  - how user data are collected and processed, and which actors (institutions and vendors) will use the data for what purposes
- Unions should convene an ongoing sectoral debate on the impact of technology services, such as the effects of platforms and infrastructures on academic IP and academic freedom. This could be a route to developing advocacy campaigns related to academic labour in platformised HE.

2. Introduction

The use of educational technology (edtech) services in higher education (HE) has grown rapidly worldwide, particularly since the COVID-19 pandemic, bringing considerable benefits but also serious challenges to educators (Williamson and Hogan, 2021). HE institutions face a complex ecosystem of digital infrastructure and platform technologies that span a wide variety of functions and operations, with the 'digital transformation' of HE supported internationally by many government bodies, sector agencies, and private companies (Saner et al, 2023). The digital transformation of HE has raised several challenges for the labour of academic educators. Two particular areas of concern are educators' intellectual property (IP) rights when using digital platforms for teaching; and academic freedom to teach in relation to the powerful influence of both the edtech industry and Big Tech companies in education (Ducato and Priora, 2023).

As our starting point, we take the view that digital developments are complicating how the HE sector addresses issues of academic IP and academic freedom. Academic ownership of IP is crucial to academic freedom in teaching because educators should be able to retain control over their teaching materials without external intervention—and this has become all the more pressing as edtech platforms can structure and constrain many aspects of teaching (Poritz and Rees, 2021). Moreover, control of user data, where digital actors assert rights over data, can affect academic freedom when data are used as the basis to shape the pedagogic environment, materials, and decision-making. However, little sector-wide consensus exists about how to address such issues, complicated by a range of different national and institutional approaches.

In this report, we present an aggregate view of the challenges to academic IP and academic freedom posed by new digital developments. The study is based on the collection and synthesis of available information from a variety of countries, but it is important to note that many of the issues are context-sensitive, and not all of them are relevant everywhere. The research considers commercial educational platforms and infrastructure systems widely used in universities in order to identify the IP and academic freedom implications for HE educators' labour and working conditions. This report aims to identify some of the most urgent issues and recommend further actions for research, labour unions and key sectoral bodies. It provides a high-level view, but much more detailed, context-specific research on edtech platforms in regional, national and local sectoral settings is necessary to understand problems of academic IP and freedom in more depth and address them.

Edtech, IP and academic freedom

The expansion of edtech in HE has introduced new challenges relating to academic IP ownership. While IP rules over academic teaching-related content vary considerably in different national contexts, it is customary in many parts of the world for academics to hold ownership over what they produce. Control over content is essential for the exercise of academic freedom. However, the rapid proliferation of digital platforms and services in HE over the last decade has made exercising academic IP rights less clear:

> *Who owns the teaching content once it is uploaded to the university's learning management system? Where does IP ownership reside for blended or online courses that are created by a team of instructional designers and media producers working with the faculty member? … If the university is providing resources for the creation, storage and dissemination of digital learning materials but those digital files are based on a professor's ideas, then who owns the IP? Is ownership even the issue? Or, is it an issue of access rights and who can grant them?* [1]

During the pandemic, for example, HE teachers and researchers became increasingly concerned about HE institutions claiming ownership of teaching materials posted on platforms,[2] or platforms repurposing materials uploaded by academics (Pascault et al, 2020). Many academics and HE institutions faced new challenges regarding their digital rights over recorded lectures and other materials posted on digital infrastructures and platforms as a result of confusing and contested legal IP arrangements.[3] Similar concerns have been raised about content-sharing platforms where there have been instances of teachers' IP rights violations as teaching materials, lectures, assessment questions, or other related content have been shared without teacher consent or choice.[4]

Digital platforms and services in HE can also affect academic freedom. Concerns include academic content being open to scrutiny and control by managers as part of institutional monitoring practices, or possible

1 Maloney, E.J.and Kim, J. 2019, 11 June. Intellectual property and digital learning. Inside Higher Ed: https://www.insidehighered.com/digital-learning/blogs/technology-and-learning/intellectual-property-and-digital-learning.
2 Kneese, T. (2021, 27 January). How a dead professor is teaching a university art history class. Slate: https://slate.com/technology/2021/01/dead-professor-teaching-online-class.html
3 Brown, A. (2021). Who owns online lecture recordings? HEPI Policy Note 32: https://www.hepi.ac.uk/wp-content/uploads/2021/11/Who-owns-online-lecture-recordings.pdf
4 Peiser, J. (2022, 17 March). A professor found his exam questions posted online. He's suing the students responsible for copyright infringement. The Washington Post: https://www.washingtonpost.com/nation/2022/03/17/chapman-university-professor-lawsuit-copyright-cheating/

content vetting through the terms of use of platform providers, where the platform determines 'permissible' content (Tanczer et al, 2020). For example, according to a study surveying academics' use of platforms during Covid-19 for distance learning purposes, in some cases, a platform's automated content moderation technologies might automatically remove a teacher's content or third-party materials they have posted, meaning 'teachers would be obstructed, and potentially disincentivised, to upload learning material in an open or closed online environment, even when such use would be perfectly lawful' (Jütte et al, 2022).

Edtech byproducts such as data analytics, AI and predictive technologies can affect academic freedom and the rights of HE staff to make professionally informed judgments and decisions. Increasingly, automated systems are promoted to educational institutions with the promise of improving access to learning materials, predicting outcomes, and 'personalising' content to match an individual's anticipated needs. However, any such automated intervention can also bypass teachers' professional autonomy by making data-driven decisions about the sequence or level of study materials without educators' participation. The control and governance of data generated by digital platforms is a crucial factor too, as academic staff may have very limited knowledge or autonomy over the data that is collected, what kind of inferences are made based on this data, or how it is used more broadly.

License agreements

Digital technologies in HE come with licences and terms and conditions that determine their access and use by HE institutions and individual users. A licence agreement (also called terms of use, terms of service or terms and conditions) is a key device governing relations between platform owners and their users (Sadowski, 2020). Indeed, terms of service have become 'the law of the internet' or 'cyber regulation' (Belli and Venturini, 2016, Sandeen, 2003). They have the status of a contract and are consequently substantially relevant to the users (Lemley, 2006). The power asymmetry of such contracts is high, with platform owners determining the conditions of use, as well as reserving the right to make changes to their service. Moreover, there is a problem with such a 'notice and consent' approach as users have no choice but to consent, and a vast majority of platform users never read licence agreements (Maronick, 2014, Obar and Oeldorf-Hirsch, 2020).

In the instance of students and staff using platforms via their universities, terms and conditions are subject to negotiation between the service operator and the HE institution procuring the service, with any changes to a contract requiring consent from both parties. Individual staff members or students may not be party to such notice and consent processes as institutions negotiate those terms and any subsequent modifications on their

behalf. The formal agreements and contracts made between HE institutions and technology providers in relation to academic content and data have, therefore, become of particular concern. These agreements may include clauses that: (1) assign IP rights related to the content created or shared through the platforms, and (2) determine rights related to data collection, processing and ownership.

The increasing use of digital technologies in HE, then, means that HE institutions operate in a layered, complex context of technological, legal, and economic rules and practices involving many actors, including companies, national authorities; and users and HEIs themselves. We focus here specifically on issues around IP and academic freedom as they relate to academic labour in teaching and learning processes, as well as digital data that academics and students leave behind when they use and engage with platforms. We review platforms most used by academics employed at HEIs and other platforms relevant to their labour.

3. Review of relevant literature

The deployment of digital technologies in HE has proliferated over the past decade, demanding that critical analysts attempt to make sense of their various operations and effects (Selwyn, 2014). Critical scholarship has highlighted how HE systems have, over several decades, become more marketised and commercialised, characterised by many core functions being 'unbundled' into discrete services that can be outsourced to external providers (Komljenovic and Robertson, 2016). In this context, digital technology platforms and infrastructures have been integrated into HE institutions and practices, including management and administration, teaching and assessment, and student experience and learning (Williamson, 2018). The edtech industry has become part of the apparatus of universities by providing platform services for myriad everyday processes, with 'Big Tech' corporations like Google, Microsoft and Amazon also providing critical infrastructure for operational IT services (Komljenovic, 2022).

A key effect of the integration of edtech and Big Tech into HE is on academic labour, as the presence and demands of an increasing array of technological systems reshape educators' daily work (Castañeda and Selwyn, 2018). In this brief literature survey, we highlight two key interrelated aspects of this transformation of academic labour. First, we review previous studies of the IP implications of digital HE, and second, the effects on academic freedom. We also note how academic IP and freedom may be affected by the growing business practice of treating academic content and educational data as valuable digital assets for edtech and Big Tech firms.

In this brief literature review, we include studies discussing all technology academics use in everyday teaching practices, including technology they might use for teaching purposes outside of university contracts, such as social media (e.g. Facebook) and other popular platforms (e.g. YouTube). Particular challenges over IP, data and other user rights differ from those platforms that academics use via their institutions (e.g. LMS). However, we include the wider variety of challenges here, as very little research exists detailing the specific IP and academic freedom implications of the technical, legal and financial arrangements between institutions and platform proprietors.

IP and academic content

Digital forms of education place new pressures on HE institutions and systems to develop or change IP policies. Though legal mechanisms have existed since the mid-1800s to protect academics' content related to

teaching from exploitation by third parties—such as the unauthorised selling of lecture notes—digitalisation of HE has raised distinctive challenges regarding the ownership and copyright of academic content when it is published and distributed on an online learning platform or cloud-based digital infrastructure (Deflem, 2021). This is complicated by the fact that HE educators generally have a low degree of awareness of copyright rules or IP rights (Jütte et al, 2022).

Previous studies of the terms and conditions of digital platforms routinely used in HE have addressed two key questions: who formally owns the content that has been uploaded or otherwise shared on a platform, and which rights are licensed to platform providers under the terms and conditions of the service? Although platforms' terms of use vary considerably, when it comes to academic IP, the copyright typically belongs to the content producer rather than the platform proprietor. Rather than claiming ownership, some platform providers may require users to license their content to the provider so the service can operate. This includes basic purposes such as making copies, adjusting format, publishing, distributing and making content available for streaming by authorised users. In some cases, it includes the creation of derivative work.

The licence given by terms of use may contain more vaguely articulated purposes, such as using uploaded or shared content to improve the platform service, including for the development of commercial features. Licenses may also require users to allow their content to be used by other third parties for a variety of purposes—often qualified through terms including 'worldwide', 'royalty-free', 'non-exclusive', 'transferable', 'sub-licensable', and 'perpetual' (Pascault et al, 2020). While giving the licence over content may be more prevalent in cases where individual users engage with platforms directly, HE institutions should also negotiate content arrangements carefully. The challenge for those responsible for platform procurement is to negotiate such terms before signing a contract, with the signed contracts typically not visible to the majority of staff or students.

Additionally, according to prior studies of licensing agreements, the purposes of such licenses can be unclear, making it hard to discern exactly what the license permits the platform proprietor to do with uploaded academic content. In some cases, it can even include using academic content to promote the service or feature complex sublicensing agreements giving authorisation for content to be shared with third parties for unspecified reasons (Ducato et al, 2020). In such cases, such licenses could translate into individual academic educators losing control of their own content as it could be used for purposes not anticipated when originally designed for educational delivery. In cases of platforms procured by HE institutions, ascertaining details about the agreements that institutions sign with vendors is challenging because the contractual environment of HE can be opaque, with limited access to documents.

Academic freedom and digital platforms

Academic freedom refers to the free and unconstrained pursuit and dissemination of knowledge, often separated into freedom to teach and freedom to research. The increasing use of digital platforms in universities has led to significant concerns over academic freedom for both staff and students.[5] Previous research on academic freedom in the context of digital platforms has identified two particular issues.

First, potential pressure is placed on academics to produce 'permissible' or copyright-compliant content in the context of external pressure either by state institutions or platform proprietors. In the former instance, for example, concerns have arisen about state agencies or organisations directly or indirectly curtailing intellectual inquiry and critical thinking in an increasingly internationalised HE context, such as by preventing academics from expressing views, as well as teaching and conducting research, on topics within their areas of academic expertise.[6] This may include the enforcement by platform proprietors of content moderation and removal mechanisms such as notice-and-take-down orders intended to enforce copyright liability (Ducato et al, 2020), especially if using platforms not provided directly by universities.

Second, another relevant right related to academic freedom is teachers' capacity 'to determine autonomously how and what they teach and how related materials are presented to others' (Deflem, 2021). A report on academic freedom in the UK highlights how the freedom to teach includes:

> *Freedom to determine what shall be taught (course content); freedom to determine how it shall be taught (pedagogy); freedom to determine who shall teach (via transparent selection procedures); freedom to determine whom shall be taught (the right to determine and enforce entry standards); freedom to determine how students' progress shall be evaluated (assessment methods); freedom to determine whether students shall progress (via marking criteria and grade determination).*[7]

5 National Association of Scholars. (2020, 6 May). Academic Freedom and Online Education: A Statement of Principles: https://www.nas.org/blogs/article/academic-freedom-and-online-education

6 Academic Freedom and Internationalisation Working Group. (2020). Model Code of Conduct for the Protection of Academic Freedom and the Academic Community in the Context of the Internationalisation of the UK Higher Education Sector. Human Rights Consortium: https://hrc.sas.ac.uk/networks/academic-freedom-and-internationalisation-working-group/model-code-conduct

7 Karran, T. and Mallinson, L. (2017) Academic Freedom in the U.K.: Legal and Normative Protection in a Comparative Context. UCU: https://www.ucu.org.uk/media/8614/Academic-Freedom-in-the-UK-Legal-and-Normative-Protection-in-a-Comparative-Context-Report-for-UCU-Terence-Karran-and-Lucy-Mallinson-May-17/

Digital platforms may pose particular challenges to academics' pedagogic freedom to teach in several interrelated ways. One is that platforms impose particular templates to which educators must adapt their materials and teaching. Some platforms run by educational publishing firms may make agreements with HE institutions to provide all content and materials. Alternatively, the standardised design architecture of a platform, such as an LMS, may restrict teacher pedagogic autonomy and discretion to decide how and what they teach, further enforced by copyright rules that might determine the third-party content they are permitted to use:

> *The primary problem with the LMS is that it sets a framework for the way faculty members interact with their students. The structure of the LMS greatly affects the nature of the assignments faculty members are able to give, the way they assess student learning, and especially the materials they can select to teach. Some of these issues depend on the decisions made and policies set during the installation of the LMS on campus. Others depend on decisions made by the LMS company itself on behalf of all its client campuses. A department chair or dean shouldn't influence decisions about curriculum and classroom management, and campus information technology staff or programmers working for outside companies shouldn't have that kind of control either (Poritz and Rees, 2021).*

It is rarely the case that educators themselves have a choice about the procurement or implementation of the platforms that will structure their teaching, despite the potential effects on their academic freedom to teach.

A related challenge to academic freedom from platforms is if the analysis of student data is used as the basis for adjusting or 'personalising' content and pedagogical approach to suit an individual's predicted need, thereby restricting educators' pedagogic autonomy (Kerssens and van Dijck, 2022). Data analytics-based platform services can make various decisions automatically, leading users to make particular decisions or denying users choice for decision-making altogether, ultimately running counter to principles of academic freedom and autonomy for both educators and students (Jones, K.M.L., 2017). In such cases, pedagogic discretion is offloaded to platforms. Platforms can thus challenge academic freedom, as they can constrain educators' pedagogic practices and shape or bypass their pedagogic autonomy by delegating decision-making to automated technologies, but they are also highly lucrative for both edtech and Big Tech operators.

pdf/ucu_academicfreedomstudy_report_may17.pdf

Assetisation of user content and data

Emerging challenges to academic IP and academic freedom result from a business model in the Big Tech and edtech industries. The business model focuses on generating long-term income from institutional subscriptions to platforms and further value creation from user data. The business model is characterised by processes and practices of 'assetisation' and 'rentiership' (Komljenovic, 2021).

Assetisation refers to a process of generating future economic benefits by controlling an asset or access to it, such as a digital learning platform or the data it generates (Birch et al, 2021). It is, therefore, distinct from the idea of commodification, where something is sold for immediate benefit. In the technology industry, including edtech, the shift has been towards controlling digital platforms and charging ongoing subscription fees for users to access them while simultaneously extracting data from the use of the platform service.[8] These subscription fees and data extraction can both be considered as rentiership: users never own a platform but merely pay monetary rent to access one, while the platform also takes 'data rent' as the digital traces left from users' interactions with the platform can also be used to generate further value (Sadowski, 2020).

Assetisation and rentiership are emerging economic factors in the increasing proliferation of digital platforms and data extraction in HE. They are implicated in the issues of academic IP and freedom outlined above. When edtech companies claim their services and user data are value-making assets, that means the firms claim IP and control rights, with universities paying rent to access that IP-protected service. Universities pay subscriptions, or economic rent, to the platform proprietors that may affect academic ownership of content or restrict educators' pedagogic autonomy. They are additionally providing data rent in the shape of valuable user data about staff and student interactions with the platform, which may be used to augment or even, in some cases, automate aspects of academic labour (Komljenovic et al., 2024). The future economic benefits for vendors also come from building moats by locking in HE institutions with long multi-year contracts and very high switching costs. While it may be easy for an HE institution or individual to add content and data to a platform, it may be prohibitively difficult to extract it and extremely costly to switch providers, thus limiting institutions' ability to change from one provider to another (Giblin and Doctorow, 2022).

The key issue here is how data use agreements are negotiated when a university enters into a subscription and licensing contract with an

8 Birch, K. (2022, 23 February). Beware efficiencies! Assetisation as the future defraying of costs savings in the present. SRHE blog: https://srheblog.com/2022/02/23/beware-efficiencies-assetisation-as-the-future-defraying-of-costs-savings-in-the-present/

educational platform vendor. Most education platform proprietors commit to not sharing or selling users' personal data and have strict privacy policies in place. They tend to collect two types of data. The first, personal data, tends to be protected in some countries. However, for education platform companies, there is potential value in collecting huge quantities of user activity data. These are data indicating how a platform has been used, and are most valuable when aggregated into massive data sets (Pistor, 2020). These user activity data are generally controlled by the platform companies that collect them and are difficult for institutions to access. Even when the data are available, institutions rarely have the data science skills and infrastructure to process them, and must consequently outsource to third-party analytics companies. Data agreements are therefore critical in edtech and Big Tech companies' efforts to generate monetary value from user data.

Licensing educators' IP and data use are intricately connected to the contractual agreements made between HE institutions and digital platform providers at the point of procurement, with these purchasing decisions often raising far-reaching implications for institutional users.[9] Far from merely a formal process of software purchasing, procurement is better understood as a complex contractual negotiation (Scott and Clarke Gray, 2023) through which faculty and students' digital rights and interests are implicated in negotiations over software licence and data use agreements between institutions and operators.[10] Indeed, the IP and data agreements signed by institutions are often negotiated on an institution-by-institution basis, as few standardized models exist to guide them in these purchasing decisions and are rarely available for examination by academics or researchers.[11]

9 Feathers, T. (2023, 27 July). How to Buy Ed Tech That Isn't Evil. *The Markup*: https://themarkup.org/the-breakdown/2023/07/27/how-to-buy-ed-tech-that-isnt-evil

10 Allens, D., Chan, L., Chirila, N., & Valverde, M. 2020. When public universities contract with 'ed tech' vendors: issues concerning 'Learning Management Systems' and online learning. Working Paper 1, Discovering University Worlds, University of Toronto.

11 Hillman, V. (2022). Edtech procurement matters. LSE Social Policy working paper: https://www.lse.ac.uk/social-policy/Assets/Documents/PDF/working-paper-series/02-22-Hillman.pdf

4. Methodology

Our data consists of several sources. We focused on platforms' policies and documents, but complemented these with other sources, including media publications and academic research. We reviewed four groups of technologies, representing their common uses in universities, as per Table 1:

- **Learning:** The first group of platforms includes those that universities use to deliver or facilitate teaching and learning, such as virtual learning environments (VLE), massive open online courses (MOOC) and online programme management platforms (OPM)
- **Assessment:** The second group includes those platforms universities use for assessment purposes, such as plagiarism detection or online proctoring
- **Infrastructure:** The third group includes platforms that offer cloud-based digital infrastructure as a backbone for other platforms and applications and the institutional digital ecosystem
- **Content sharing:** The fourth group includes platforms that allow content exchange and target individuals directly

For the first three groups of platforms, the customer is the university, which also pays for subscriptions or other fees. End users are individuals, staff and students. The fourth group of platforms offers services to individuals who pay any subscription or other fees alone.

In this study, reviewing specific institutional contracts with vendors was not possible. To allow for macro level overview and identification of risks to HE teachers, we reviewed platforms' terms of use/terms and conditions, privacy policies and associated documents. In addition, we examined examples of national or sectorial arrangements. We also collected news and blogs about the most prominent cases on issues of concern. See the Appendix for details on the reviewed documents.

Finally, we conversed with seven expert informants with expertise in HE institutions' digital procurement, contracting, and arrangements over IP. The countries in which our experts are based are as follows: Argentina, Belgium, Canada, Norway, Uruguay, the United States of America, and an international expert working across borders. The range of countries allowed for regional, political, and wealth diversity, as well as differences in regulating both, HE and digital markets. Three out of seven informants were Education International members, i.e. from Argentina, Canada, and Norway.

Table 1. Platform groups with examples.

1. Learning	2. Assessment
Platforms universities use to facilitate teaching and learning online or on-premise. *Examples include:* - *Virtual learning environments (VLE) and Learning Management Systems (LMS): e.g. Anthology (Blackboard), Instructure (Canvas)* - *Massive Open Online Courses (MOOCs): e.g. global MOOCs Coursera, FutureLearn, EdX* - *Online Programme Management platforms (OPMs): e.g. Pearson, 2U, Wiley*	*Platforms universities use to assist in various assessment-related activities.* *Examples include:* - *Plagiarism detection: e.g.TurnItIn* - *Online proctoring: e.g. ProctorU, Online proctored by Pearson*
3. Infrastructure	**4. Content exchange**
Cloud-based digital infrastructure provides the basis for other platforms and applications and is a backbone of the institutional digital ecosystem. It supports many university-wide processes. *Examples include:* - *Amazon Web Services (AWS)* - *Microsoft suite* - *Google*	*Platforms students use to access content posted by other users and exchange study notes.* *Examples include:* - *CourseHero* - *StuDocu*

We first studied and analysed platform policies of chosen platforms (see Appendix), followed by institutional examples and national contexts. We noted key arrangements, identified governance mechanisms and illuminated the key risks for HE teachers. We then discussed the identified arrangements, mechanisms and risks with informants. We complemented our analysis with reporting from the news.

There are a few important limitations of this study. First, we were able to gather limited information from the Global South, where the legislative frameworks and the awareness of digitalisation trends are different than in the Global North. Second, we were able to review macro-level and publicly available documents with a focus on platform policies, but not more specific contextual and institutional arrangements. This allows us only to indicate potential risks and illuminate key trends. Third, it was not possible to conduct a detailed analysis of institutional documents across universities worldwide.

We focused on possible threats to IP ownership and academic freedom of HE teachers and researchers caused by the use of edtech platforms and compliance with their terms and conditions. Our analysis identified three key trends as the most pertinent risks and challenges for academic staff, which we elaborate on in detail below.

5. Findings: key trends and their challenges

5.1. Academic content

About

University teachers produce various kinds of teaching artefacts in digital form. They include lecture recordings, slides, notes, handouts, quizzes, assignment instructions, assessments, textbooks, and more. Although questions on ownership and rights over such artefacts are not new, digital technology brings three current contextual factors impacting IP. First, traditional/on-campus teaching is increasingly supported by digital technology, such as LMSs or cameras recording lectures in classrooms. Second, the COVID-19 pandemic moved teaching online, producing masses of new digital material and technology-based practices that have persisted beyond the pandemic. Finally, there is an increase in the number and scale of online courses and online students. Universities in countries treating HE as an export industry are encouraged to deliver online courses at scale for relatively high tuition fees. At the same time, universities in countries lacking HE capacity are encouraged to use online delivery to increase access (Timmis and Valladeres-Celis, 2022). The shift to increasing use of digital and online services raises several issues regarding academic IP rights.

Ownership rights

University teachers face new challenges over the rights of the content they produce. Digital education platforms typically do not take ownership of content that users post, such as lecture slides, lecture recordings, posts on discussion forums, and other teaching and learning artefacts. The content remains owned and controlled by academics who produced it or by their employing universities, depending on the local arrangement. In other words, it is between an academic and the employing university to determine who owns and controls the content produced by an academic and posted on a proprietary or other platform. This is typically stated in the terms of use of the platforms. The terms of the LMS Blackboard Learn, owned by Anthology, for instance, state that 'You retain your rights to any Content you submit, post, or display on or through the Products'

(Anthology terms of use), while the terms of the LMS Canvas, operated by Instructure, likewise state that 'Instructure does not claim ownership of Your Content' (Instructure terms of use).

Different practices exist in different countries and regions regarding the relationship between an academic and their employer university. Academics generally keep the rights over their teaching materials in North America, while universities retain those rights in Europe.[12] A study of 81 UK universities' copyright policies found that 77% claim ownership of internal teaching materials, while 84% claim ownership over e-learning materials (Gadd and Weedon, 2017). For example, HE institutions can retain ownership of teaching materials for the use by others within the institution:

> *As stated in the University Policy for Intellectual Property Exploitation and Revenue Sharing, the University owns the intellectual property of the Teaching Materials (as defined in the Policy) created by staff and the recording of the lecture, whereas staff retain ownership of their performance rights which are licensed to the university for a limited period. … The University owns the copyright to Teaching Materials, but the Policy for Intellectual Property Exploitation and Revenue Sharing provides a license to staff to use Teaching Materials for non-commercial research and teaching purposes for as long as they remain staff of the University. (Lecture Capture: FAQs)*[13]

Universities tend to differentiate between online courses and on-campus courses. For online courses and programmes, it seems that the trend is to change practice so that universities take license over teaching material. This means that universities can use recordings and other material even after the academic is no longer employed at that university and does not teach the course, but normally acknowledging the authorship. This seems to concern students when they discover they cannot communicate with the teacher on the recording, as reported in Canada[14] and Australia[15].

Protecting rights

Digital content is easily reproduced and can lead to infringement of academics' copyright. From a technological point of view, users can copy content and exploit it in different ways with little effort. However, this is problematic legally. Platforms' terms typically prohibit users from using

12 https://www.insidehighered.com/news/2020/05/19/who-owns-all-course-content-youre-putting-online
13 https://www.abdn.ac.uk/staffnet/teaching/lecture-capture-faqs-11690.php#panel11782
14 https://www.reuters.com/article/us-global-tech-rights-analysis-trfn-idUSKBN2A521B
15 https://www.theguardian.com/australia-news/2023/mar/07/no-actual-teaching-alarm-bells-over-online-courses-outsourced-by-australian-universities

content differently than intended, especially to share elsewhere. For example, the online learning platform provider FutureLearn states:

> *You will not copy, reproduce, create derivative works of, distribute, transmit, broadcast, display, sell, license, or otherwise exploit any content contained on the Website (including without limitation the Online Content and Courses) for any other purpose other than as permitted by these Terms without our prior written consent. (FutureLearn Terms and Conditions)*

Nevertheless, some platforms enable individuals to knowingly or unknowingly post protected content and consequently infringe the IP rights of academics or universities, such as student notes sharing platforms (e.g. CourseHero).

Platforms typically outline the process for reporting IP infringement in their terms. Platforms generally remove any content alleged to infringe any IP and investigate the case. They specify various consequences for users who post such content, including withdrawal of rights to use products, removal of one's content, issuing a warning, legal action, and disclosing information to law enforcement. For example, edX specifies that it may:

> *At any time and without prior notice, screen, remove, edit, or block any User Content that in our sole judgment violates these Terms, is alleged to violate the rights of third parties, or is otherwise objectionable. ... . If notified by a user or content owner that User Content allegedly does not conform to these Terms, we may investigate the allegation and determine in our sole discretion whether to remove the User Content, which we reserve the right to do at any time and without notice. For clarity, edX does not permit infringing activities on the Service (edX Terms of Service).*

While this is a welcome practice to protect rights over content, it might also pose a challenge for universities. We heard from our informants that universities need to negotiate with platform companies so that students and staff remain subject to the university's policies (e.g. the university code of conduct) and not the platform's terms of use, which can be very different and with different consequences. For example, if a student or an academic posts content infringing on someone else's IP rights, would they be investigated and acted upon based on their university rules and policies or the platform's? There seems to be a difference in practice here; and we have been told that universities need to firmly state their position that it is the university policies that govern their students' and academics' actions.

Responsibility over content

Academics are responsible for the content they post in its entirety, including that it is correct, up to the academic standards, and not offensive to others. Moreover, they are solely responsible for making sure they have all the IP rights over any content they post and relevant consent from people if they post any personal data. This is typically stated in both university and platform policies. Therefore, the onus for the content is entirely on the individual academic. Platform proprietors assert that they may screen, remove, edit or block any user content that, in their judgment, violates their terms or is 'otherwise objectionable' (edX Terms of Service).

As mentioned, the university keeps copyright over produced teaching content in many countries and may further monetise such content. In such cases, academics take full responsibility for what they produce but do not reap the benefits beyond getting paid for their labour, such as the percentage of fees paid by online students.

Platforms owning rights over content

In some cases, platforms take licence over content produced by academics. The argument is that it is needed to deliver the service. For example, the plagiarism detection platform Turnitin states in its End User Licence Agreement that users keep ownership of papers and assignments uploaded to its platform but need to give a licence to Turnitin for plagiarism prevention service:

> *If You submit a paper or other content in connection with the Services, You hereby grant to Turnitin (and, if necessary for providing the Services its affiliates, vendors, service providers, and licensors) a non-exclusive, royalty-free, perpetual, worldwide, irrevocable license to use such papers, as well as feedback and results, for the limited purposes of a) providing the Services, and b) for improving the quality of the Services generally. … . The licenses shall survive the termination of the User Agreement. (Turnitin End User Licence Agreement)*[16]

There have been examples where students felt their IP was infringed, for example, by Turnitin, which resulted even in students suing the company. However, the courts ruled in favour of Turnitin with an argument that it is fair use by Turnitin to deliver its service.[17] Turnitin was acquired by

16 https://www.turnitin.com/agreement.asp
17 Hendry, N. (2009, 3 August). Students Reach Settlement in Turnitin Suit. Chronicle of Higher Education: https://www.chronicle.com/blogs/wiredcampus/students-reach-settlement-in-turnitin-suit

the Advance Publications media conglomerate in 2019 for $1.75 billion, illuminating the substantial asset value of the platform derived from the mass submission of student content.[18]

Additionally, in most countries, academics or their employers might own their IP, but it is not clear that it is always possible to extract the content or material once it has been posted on a learning platform. Even where a platform, such as a LMS, enables a course export function, features of a course design may be lost in the process, such as all the structuring and formatting beyond uploading content. At the least, it requires experienced in-house technologists at universities to be able to facilitate the extraction of academics' IP-protected content from any single platform. Therefore, institutional decisions about signing licenses with platform vendors function as a proxy lock-in mechanism, preventing educators from extricating their labour or content without significant institutional investment.

Challenges

We identified three key challenges regarding teaching content and academics' IP rights on edtech platforms. First, potential change of practice in IP over content; second, potential monetisation of content by universities; and third, new practices that bring new demands.

Challenge 1: Potential change of practice in IP over content

As described above, various rules exist in different countries, and even within countries, about whether academics or their employer universities control the content that academics produce for teaching. We explore the example of the USA to showcase the risks for university teachers.

Struggle over IP rights in the USA.

Most universities differentiate between teaching material produced for on-campus students and online courses, where universities are more likely to take copyright for e-material produced for online courses. For example, Purdue University in the USA "adopted an IP standard saying that courseware and online modules are commissioned copyrightable worked retained and managed as Purdue IP. The policy defines courseware as

18 Johnson, S. (2019, 6 March). Turnitin to Be Acquired by Advance Publications for $1.75B. EdSurge: https://www.edsurge.com/news/2019-03-06-turnitin-to-be-acquired-by-advance-publications-for-1-75b

curricula for distance learning or e-learning, and it recommends that university personnel who help create it enter into a formal ownership agreement with the university. In the absence of such an agreement, however, the courseware belongs to the university, even after the professor or professors involved leave Purdue".[19]

It seems that there is acceptance of this differentiation among university staff. For example, if "a team that consists of a professor, a learning designer, a librarian and a media expert is developing digital content for an online course, then shared IP ownership (between the professor and the school) is probably appropriate".[20] Consequently, with the increasing spread of online courses, there is a risk for university teachers that the licence over their content will be owned increasingly by their employer university.

Moreover, there is a constant struggle between academics and universities to determine the rules in new circumstances. For example, as universities moved to teaching online during the COVID-19 pandemic, there was a possibility that universities would take license over the material produced for such remote teaching, too. Because the current IP arrangement is practice, not law, in the USA, collective action is needed to keep the copyright over the material produced. As such, it has been claimed that "on these things, you have to take collective action. People make a difference in what happens. Without that, faculty could have potentially lost all IP rights in posting everything online in the transition to remote instruction".[21]

Indeed, collective action followed at institutional and national levels. The American Federation of Teachers and The American Association of University Professors issued a joint statement in March 2020 'Principles for Higher Education Response to COVID-19, which stated the following about IP:

> *Institutions should not take this opportunity to appropriate intellectual property to which they would not otherwise have had access; teaching materials moved online because of the one-time emergency created by COVID-19 are not the property of the institution for future use.... New contracts signed with online program managers specifically to handle this crisis should be of short duration, should contain robust protections for faculty intellectual property, and should be fee-for-service only (not a percentage of tuition).*[22]

The risk and challenge of protecting IP rights over content is also noticeable in instances such as a change of ownership of platforms. When

19 https://www.insidehighered.com/news/2020/05/19/who-owns-all-course-content-youre-putting-online
20 Ibid.
21 Ibid.
22 https://www.aaup.org/news/aft-and-aaup-principles-higher-education-response-covid-19#.XsK0IC2ZPPA

2U acquired edX from MIT and Harvard, it agreed to protect the IP rights of academics who had produced original MOOC content, stating that "Faculty will retain all existing intellectual property agreements for all of their course content. Those who choose to continue to offer their courses on edX after the transaction closes will be able to decide what courses to offer and when, and will continue to control all decisions around course design".[23]

This vignette exemplifies that struggles over content IP remain continuous and ongoing. New circumstances emerged with the expanding digitalisation of the sector and the increasing number of online courses via university platforms or in partnership with OPM or MOOC platforms. These circumstances demand a vigilant and collective response from academics to protect their IP and rights over their intellectual outputs. Moreover, they also present moral questions about enclosing and charging for content IP. As one of our informants stressed, in some US states, OPM providers can retain IP rights over content; such ownership over content assets confers a greater potential financial advantage for edtech companies.

Challenge 2: Potential monetisation of content

Since universities in some countries and localities own copyright over academic content, they might treat it as an asset from which they can profit in various ways. We explore the example of the UK to showcase the potential future challenge emerging with the monetisation of content as an asset. Such ideas are relatively new, and we found them expressed in reports about future revenue-generating strategies, though they do not seem to have been put into practice yet.

JISC and Emerge Education on diversifying income streams

In the UK, universities possess intellectual property rights or facilitate academics to license their teaching materials (like course materials and video recordings) to universities. There are efforts to monetise these resources and consider them as valuable assets. The report on the revenue diversification in higher education written by the sectorial agency JISC in partnership with the educational technology investor Emerge Education states the following as a potential new source of revenue for universities:
'Commercialising 'education IP' for other institutions: This model entails the licensing of one university's educational courses, content and/or pedagogy

23 https://news.mit.edu/2021/mit-harvard-transfer-edx-2u-faq-0629

to another university or education provider. Specifically, students from one university will be able to access a course or content from another university while still remaining enroled at their original institution. This enables universities to cross-sell and increase their revenue in a highly cost-effective way, without the need to launch brand new product offerings. As global enrolment in HE is expected to double and reach 400m by 2030, this model creates an opportunity for the >90% of students that attend 'unranked' institutions to access content from the world's leading universities'. (Jisc and Emerge Education, 2021, pp 16-17)[24]

While we did not find enclosing and monetising content from proprietary platforms that universities procure (e.g. LMSs or MOOCs do not have rights over content), we did find ideas for universities to do so. In such cases, the content would be enclosed and profited from instead of openly shared to support accessibility. Moreover, instead of developing competence and resources at all universities to provide HE via engaging with students, such an arrangement could increase the divide between richer universities that can profit from their content and grow their institutional competence, and other universities that would struggle with a small number of teachers, lack of competence, and lack of resources for working with students closely. There also appear to be assumptions in such examples that content would be culturally appropriate in other contexts.

Challenge 3: New practices and new demands

Digital platforms enabling the sharing of content at scale have emerged, a relatively new development for HE and introducing new challenges of IP infringement. We explore the example of CourseHero, which allows students to share notes about their lectures, though there were cases where students shared others' IP without permission. With this example, we illuminate new practices and demands such platforms bring to HE.

24 https://beta.jisc.ac.uk/reports/the-future-of-revenue-diversification-in-higher-education

CourseHero copyright infringement

Launched in 2006 and growing over time, CourseHero reached $3.6 billion valuation in 2021. In December 2022, it rebranded itself to create a corporate parent for itself and other units, Learneo, Inc. CourseHero describes itself as follows:

> *'Course Hero supports students on their unique learning journey as they seek help and resources to better understand their coursework, prepare for exams, learn and remember. Students can subscribe or contribute their own resources to access millions of learning materials including practice problems, study guides, textbook solutions, and step-by-step explanations for every subject. More than 100,000 faculty across the United States, Canada, and Australia have joined the Course Hero educator community to share their resources, collaborate with other faculty, and hone new strategies for instruction'.* (CourseHero website)[25]

CourseHero has been a target of many news stories about individuals posting content with IP infringement, such as exams and their answers. A well-reported case from the USA followed a professor who sued anonymous students for posting his exam questions and answers on CourseHero. He stated that this was the only way the platform would release the names of those who posted the content. His plan was to hand the names over to the university for dealing with students in question based on the university code of conduct.[26]

This case surfaces several emerging challenges over IP protection. First, academics might need legal help, which they might need to pay themselves, which brings new financial burdens. Second, academics can be left on their own to monitor such sites and find their content uploaded, which brings new workload pressure and new responsibilities for policing content-sharing services.[27]

In its Terms of use and other policies, CourseHero explicitly prohibits copyright infringement and explains to its users that they can only post their own content. For example, its Copyright Policy states "Course Hero users are prohibited from uploading or submitting copyright infringing content. In other words, only submit your original work and not works created by someone else without their express authorisation." The platform also reports that they deal with all take-down notices swiftly and investigate all reported cases.

25 https://www.coursehero.com/about-us/
26 Reul, K. (2022, 8 April). Course Hero hands over student identities to Chapman professor following lawsuit. The Panther: https://www.thepanthernewspaper.org/chapman-university-v-press/l9fzv42ezxaxhse0u95lu0ylvge9z1-hcmnp
27 https://www.cbc.ca/news/canada/montreal/student-help-site-course-hero-raises-plagiarism-copyright-concerns-1.3035196

This vignette exemplifies the increasing workload for academics and universities that content sharing platform services may bring in order to protect copyright materials. Our informants told us that some universities now employ full-time staff who search for any content posted on platforms or online by students that infringes on the institution's IP. We were told they mostly search for exam questions and submit take-down requests.

Such platforms might mean more workload for individual academics in two ways. First, monitoring such platforms themselves and reacting would take time. Second, students uploading content might bring more work to academics as they would continuously need to update course material and assessments. This might prove even more problematic in subjects that are externally accredited, and exams are set and fixed. It is also an opportunity for litigation. For example, Lento Law Firm specifically targets students accused of academic misconduct for using CourseHero and offers them legal help.[28]

5.2 User data

About

Edtech platforms procured by universities collect user data (posted content, engagement and user activity data). From an IP perspective, the significance of such data is that platform operators can exercise control over some of this data, treating the data as valuable assets for commercial purposes. For example, Anthology provides a sense of the data it typically collects:

Anthology's data collection

From the institution - personal info, including from institutional records, if Anthology provides payroll product, also payroll-related info such as salary, tax, etc.

Directly from individual – profile info, credentials, content and activity (which for instructors includes information about grading, feedback and assessments), audio and video recordings, etc.

Indirectly from individual – chat and audio recordings, location and events data (precise geolocation of where you access LMS), notifications (how

28 https://www.studentdisciplinedefense.com/i-used-course-hero-and-am-accused-of-academic-misconduct-what-can-i-do

one reacted to notifications, including if they listened to a voice message), device and usage info (including cookie data).

Information from third parties – affiliates, vendors and integration (such as Microsoft Azure), information from social media sites (e.g. when one logs in with their social media credentials; or a university can enable Cloud Profiles or Social Profiles, one can connect the Anthology profile with social media profiles), social media posts ('*Social media posts. Our Social Media Manager product allows institutions to collect public social media posts and comments with matching keywords and hashtags to give an institution visibility into social conversations taking place about them. Social Media Manager will retain this information for the institution even if the original content was deleted*').

Data collected from various sources and Anthology Privacy Statement.[29]

The collected user data is very detailed. Likewise, Coursera explains it collects data on "which pages of our Site were visited, the order in which they were visited, when they were visited, and which hyperlinks were clicked. We also collect information from the URLs from which you linked to our Site. Collecting such information may involve logging the IP address, operating system, and browser software used by each user of the Site. We may be able to determine from an IP address a user's Internet Service Provider and the geographic location of their point of connectivity', as well as data from third parties and so on". [30]

These examples illustrate the base level of data collected by education platforms. We now move to discuss who controls the collected user data and how it is used.

Data control and use

Digital education services raise distinct challenges related to data control. For most platforms used in university settings for purposes of teaching, learning and assessment, universities are classified as personal data controllers, while platform companies are data processors. This means universities decide which data can be collected through a platform and for what purpose it can be processed on their behalf. For example, Microsoft provides the operating systems that many universities use, as well as a range of additional services. Microsoft's Privacy Statement is illustrative:

29 https://www.anthology.com/trust-center/privacy-statement
30 https://www.coursera.org/about/privacy

Microsoft terms of service

If you use a Microsoft product with an account provided by an organisation you are affiliated with, such as your work or school account, that organisation can:

- *Control and administer your Microsoft product and product account, including controlling privacy-related settings of the product or product account.*
- *Access and process your data, including the interaction data, diagnostic data, and the contents of your communications and files associated with your Microsoft product and product accounts.*

If your organisation provides you with access to Microsoft products, your use of the Microsoft products is subject to your organisation's policies, if any. You should direct your privacy enquiries, including any requests to exercise your data protection rights, to your organisation's administrator … When you use a Microsoft product provided by your organisation, Microsoft's processing of your personal data in connection with that product is governed by a contract between Microsoft and your organisation. Microsoft processes your personal data to provide the product to your organisation and you, and in some cases for Microsoft's business operations related to providing the product… (Excerpts from Microsoft Privacy Statement)

The Microsoft policy demonstrates how data privacy requirements are the responsibility of HE institutions, not the service provider. As Anthology likewise exemplifies, platform terms of service typically refer users to their institutional privacy policies as the key governing document:

This means that the main responsibility for data privacy compliance lies with your institution as the 'data controller.' It also means that your institution's privacy statement applies to the use of your personal information (instead of ours). Your institution determines what information we collect through our products and services and how it is used, and we process your information according to your institution's instructions and the terms of our contracts with your institution. (Anthology Privacy Statement)[31]

We found universities' privacy policies less precise than some platforms' policies. For example, Anthology describes the kind of user data it would typically collect, which allows users to get a sense of what is collected and processed. While universities inform users about the data they collect and

31 https://www.anthology.com/trust-center/privacy-statement

the legal basis, they typically describe it in broad categories and refer to 'legitimate Interests' as the legal basis for data collection. Therefore, it is less clear what exactly is collected and how it is processed, without access to internal documents (for example, in the UK, institutions have to publish Data Protection Impact Assessments and Legitimate Interest documents for the digital products they procure).

This is all aligned with legal requirements, but it does seem that a typical user would need to invest a lot of time and resources to find out which exact platforms process their data. However, if data shared with platforms are not classed as personal data, then users have no right over that data at all, as this form of non-personal user data can be used for business operations.

Monetisation of data

While universities are data controllers for data collected by platforms, there are still data that platform companies control. Companies keep rights over user communication, such as data submitted to them via surveys, email, suggestions, complaints, etc. The terms and privacy policies state that this data can be used for any purpose, including improving or developing products and marketing. They also exercise control over non-personal user data, such as digital information collected about any activities undertaken on a platform.

Platforms may use user data for product development and cross-institutional functionalities in cases where customer universities allow it (as, for example, stated in Anthology's policies). Therefore, such processing allows monetising data by platforms in product development while impacting teaching and labour as it can lead to significant changes in platform functionality.

Some platform companies own several companies or products. They might share user data between them. For example, CourseHero states that all companies within its parent entity, Learneo, share users' personal data for developing products and business purposes. Another example is Anthology's acquisition of the Blackboard LMS, which was a strategic attempt to integrate data from different systems into a more comprehensive analytics package—it described it as 'the most comprehensive and modern EdTech ecosystem at a global scale for education'.[32]

Platforms may also change the terms of use and determine new user data usage and processing strategies. They are searching for new ways of

32 https://www.anthology.com/news/anthology-completes-merger-with-blackboard-launches-next-chapter-in-edtech

accessing and processing user data to make it valuable. A recent example with video-call software Zoom, which is also used in HE, is illustrative:

Zoom's changing terms of service

In the summer of 2023, Zoom changed its terms of service to allow user data processing to train its AI. It faced immediate backlash from users and went on to change its approach. However, CBS News reports that Zoom still plans to use 'service generated data' for AI training without obtaining additional user consent, while 'customer content' can still be used if the meeting organiser agrees to share data with Zoom:

> *'What kind of data can Zoom collect?*
>
> *There are two types of data Zoom can collect: 'service-generated data' such as user locations and the features customers use to interact with the service, and 'customer content,' or the data created by users themselves, such as audio or chat transcripts.*
>
> *In its blog post, Zoom said the company considers service-generated data 'to be our data,' and experts confirm this language would allow the company to use such data for AI training without obtaining additional consent.*
>
> *Service-generated data may be used for 'for the purpose of … machine learning or artificial intelligence (including for the purposes of training and tuning of algorithms and models,' according to Zoom's terms of service.*
>
> *As for customer content, Zoom may also use the data 'for the purpose' of machine learning, the same agreement shows.'* [33]

As these examples indicate, user data have tremendous value-creating potential for both edtech platform proprietors and Big Tech companies with large presence in HE, which sometimes leads to significant controversy as in the case of Zoom.[34] Nonetheless, for platform companies, user data are treated as digital assets for potential monetisation, and retaining control rights of such data is a business priority.

33 https://www.cbsnews.com/news/zoom-privacy-issues-user-agreement/
34 https://www.insidehighered.com/news/tech-innovation/artificial-intelligence/2023/08/11/faculty-concerned-over-zooms-shifting-terms

Platform data control

While universities control personal data collected via platforms they procure, these platforms keep control of parts of user activity, as well as so-called trace and log file data. This data can also be classed as product or system analytics, which platform operators require to improve the performance of a digital system and its features. However, one of our informants, with expertise in edtech contracting in HE, discussed how system analytics cannot truly be separated from learning analytics. They stated that log data is processed to impact how products function, which consequently impacts pedagogy because platforms are now routinely used in teaching.

Based on our informant, platforms profit from log and trace data by improving existing products, upgrading products, and developing new products. These developments constitute a more significant use of user data than maintaining the product. In other words, university students and staff produce user data that is then employed by the platform proprietor for product development and other forms of monetisation. User metrics can be used for profit-making by developing new features or products while impacting teaching, learning and management processes via analytics dashboards and suggestions for actions. This is exemplified by Instructure's explicit framing of student data as a value-creating asset when preparing for its sale in 2019.[35] In other words, product analytics and learning analytics may not be as distinctly separable as platform policies and agreements with institutions make out. We also heard that some universities ask to get product analytics data back from the platforms they have contracts with, for which they have to negotiate, as this is not always automatically part of the agreement that institutions sign with companies.

Platforms may keep user data for unknown periods. For example, as per its End User Licence Agreement, Turnitin keeps personal data indefinitely unless otherwise instructed by the data controller, arguably to deliver the service.[36] Institutions are not able to delete personal data from the Turnitin platform systematically, meaning it operates an indefinite retention policy by default. Therefore, user data may be difficult or impossible to remove from a platform unless negotiated and agreed in advance. According to one informant, some platforms may permit the export of any log data generated by users' interaction with a learning platform. But, as this log data is data that the vendor owns, the capacity to export it requires prior negotiation by the institution. In such cases, educators clearly have little academic freedom in determining the extraction of either their course

35 EduGeek (2019, 9 December). The Annals of the Dark and Dreadful Instructure Wars of 2019. The EduGeek Journal: https://www.edugeekjournal.com/2019/12/09/instructure-wars-private-equity-concerns-and-the-anatomy-of-monetization-of-data/

36 https://www.turnitin.com/agreement.asp

content or course-related data from a platform, with the log data retained by the proprietor as a valuable asset for ongoing analysis and potential feature or product development.

Challenges

We identified three key challenges regarding user data. First, it is unclear how user data will be used in the future; second, it is not clear for what purpose and with what impact user data will be processed; and finally, the granularity and amount of user data on educational platforms bring huge potential for staff surveillance, should institutions choose to enact it.

Challenge 1: Unknown futures

The dynamic business nature of the digital education industry makes it hard to anticipate how data might be used in the future. Indeed, companies may themselves not know how data will be used in the future, as the organisational logic of platforms is to collect data with a speculative expectation of value generation, not necessarily for planned purposes (van Doorn and Badger, 2020). Moreover, company acquisitions are increasing as the edtech industry expands and consolidates. There are instances of companies at all stages acquiring others, including older and more established edtech companies as well as start-ups. There are also instances of edtech companies going public and then being acquired and turned back into private companies. This matters because the change of ownership also means a change of purpose, practice, and strategy in relation to both platform functionality and data use.

As staff use platforms and produce data, there is always uncertainty about what will happen to the data in the future. Platform terms typically state that user data will be transferred in case of any business transfer. For example, the edX MOOC was originally launched as a non-profit entity by MIT and Harvard universities and then sold to OPM provider 2U in 2021. It states:

> *Pursuant to a sale or transfer of business or assets — edX may sell or purchase assets during the normal course of our business. If another entity acquires us or any of our assets, information we have collected about you may be transferred to such entity. In addition, if any bankruptcy or reorganisation proceeding is brought by or against us, such information may be considered an asset of ours and may be sold or transferred to third parties. Should such a sale or transfer occur, we will use reasonable efforts to try to require that the transferee use your information in a manner that is consistent with this Privacy Policy. (edX Terms of Service)*[37]

37 https://www.edx.org/edx-terms-service

When 2U acquired all of the assets of edX from MIT and Harvard for $800 million, it raised significant concerns that the deal was focused primarily on accessing 'the large user base that they could upsell and monetize', with more recent concerns that 2U may not be financially viable over the longer term.[38]

The Instructure company highlights how edtech platforms' data assets may be subject to unanticipated future uses. These potential uses are covered in their legal policies:

> *Instructure may share information in any talks about change of control: 'We may share information about you in connection with or during negotiation of any merger, financing, acquisition, bankruptcy, dissolution, transaction or proceeding involving sale, transfer, divestiture or disclosure of all or a portion of our business or assets to another company. (European Union Region Product Privacy Notice Addendum)*[39]

In this respect, user data is increasingly considered as a platform company's assets. Aligned with the dynamic business approaches of the digital economy more broadly, this means data are often collected for the potential value they might yield in the future, not necessarily because of the current requirements of a platform or for wider educational purposes. As *EdSurge* reported:

> *Instructure's CEO, Dan Goldsmith, during the company's investor conference in March 2019, when he reportedly boasted that the company has 'the most comprehensive database on the educational experience in the globe. So given that information that we have, no one else has those data assets at their fingertips to be able to develop those algorithms and predictive models."*[40]

The example of Instructure indicates that the value of data it controls is potentially very high. In its latest accounts, the value of 'goodwill' is at half of the value of its assets (in June 2023, the value of goodwill is at $1.3 B[41]). Goodwill accounts for the excess purchase price of another company (assets minus liability, and then what is paid over that value). This is not an objective or fixed value. It is whatever the buyer of the company thinks the company is worth, and it is usually based on things like the brand, intangible knowledge, intangible assets, and potentially user data.

38 Chang, C.J. and Cho, I.B. (2022, 27 October). An EdTech Company Bought edX from Harvard and MIT for $800 Million. Its Stock Price Has Plummeted Since. The Harvard Crimson: https://www.thecrimson.com/article/2022/10/27/2u-financial-struggles/

39 https://www.instructure.com/policies/privacy/EU

40 https://www.edsurge.com/news/2020-01-17-as-instructure-changes-ownership-academics-worry-whether-student-data-will-be-protected

41 https://ir.instructure.com/news/news-details/2023/Instructure-Announces-Second-Quarter-2023-Financial-Results/default.aspx

Another example of the future value of user data is that when the private equity owners of Anthology, a student information system vendor, acquired the Blackboard LMS, the $3bn deal was based on the prospects of deriving greater value from their combined data in the future, 'a revenue growth opportunity driven by cross-selling, international growth, and the opportunities to combine products and create new value, particularly at the data level'.[42]

We can, therefore, assume that the value proposition of product analytics, aggregated and de-identified user data, and other user data that universities allow platforms to use, is huge. And it can be anticipated that such data assets could be used for future innovation, including for training AI and other analytics that impact teaching and learning—potentially including applications that impact academic freedom.

Challenge 2: Unknown use

The second challenge is the unknown use of user data. Academics typically do not get to discuss the technology they use in their work, the direction of digital innovation, or the impact of different technologies from a macro perspective. They are mostly served by the technologies procured by their HE institutions and the various functionalities that such technologies provide. However, these platform functionalities importantly impact the teaching and learning process, student and labour rights, and student and staff futures.

Many platforms dictate in their terms that they may process de-identified and aggregated data and use it as they see fit. For example, edX states in its Privacy Policy that "edX may de-identify or aggregate your Personal Information and share it with the public and with third parties, including, but not limited to, researchers and business partners".[43] Instructure's Product Privacy Notice similarly states that "We may create and use de-identified or aggregate information – information removed of specific identifiers so that it cannot singly identify you (i.e., non-personal information) – for any purpose".[44]

Such unknown use of data seems to be about finding ways to profit from user data, and controlling teaching with new features that staff contributed to with their data, which universities pay for via the subscription. In other words, the staff produce data that companies may use to develop platform features that they then sell back to universities for higher subscriptions.

42 Hill, P. (2021, 13 September). The End of Blackboard as a Standalone EdTech Company. On EdTech newsletter: https://onedtech.philhillaa.com/p/the-end-of-blackboard-as-a-standalone-edtech-company/
43 https://www.edx.org/edx-privacy-policy
44 https://www.instructure.com/policies/privacy

Education platform providers subscribe to the idea that data should be collected and saved in the present for monetisation later.

Challenge 3: Labour surveillance potential

The richness and depth of collected data give lots of power to universities to potentially surveil staff and act on it. The depth of collected data suggests that universities can use such data for performance management and other checks. The majority of universities might not be doing that yet, but our informants told us that there are ideas for automating academic performance reviews based on digital data they produce on platforms.

Collecting user data from university staff opens up possibilities for universities to introduce new forms of management over its labour, similar to 'worker analytics' in other sectors. Indeed, student learning analytics data can perform this function by providing a highly granular breakdown of student performance on individual courses, leading to significant academic anxiety about such learning data being used as a proxy for performance measurement in institutional audit and performance tracking exercises (Tsai et al, 2018).

Some universities have introduced the MyAnalytics functionality of Microsoft 365, raising considerable concerns about the use of such platforms for staff performance monitoring:

Microsoft features for worker analytics

Microsoft is one of the most used Big Tech providers of enterprise infrastructure to universities and the higher education sector in the world. With its Microsoft 365 Suite, it provides a range of digital services. At the same time, it tracks user data generated by the user account and includes email, meetings, chats, calls, metadata, and so on. While it is entirely compliant with data privacy regulations, it is searching for ways to add features to support individual, group, and organisational productivity, well-being, security, and so on.

One example is Viva productivity reports, which can be computed and delivered at different levels, ranging from individual reports to group reports for team managers, or organisational reports for top leadership.[45] When HE institutions introduced the 'MyAnalytics' productivity insights feature, academics perceived this as an extension of the culture of university audit and performance monitoring into individual-level surveillance of staff working patterns. A major data protection impact

45 https://learn.microsoft.com/en-us/viva/insights/org-team-insights/org-insights

assessment on the use of such analytics in university and government settings conducted by the Dutch data protection authority characterised such features as providing 'detailed insights to system administrators about individual work behaviours', and suggested they could have a 'chilling effect'. It urged institutions to 'not use the new Teams Analytics & Reports service' or 'at least opt for pseudonymous viewing', and to establish clear 'policies to prevent Microsoft's analytics services from being used as employee monitoring systems'.[46]

Moreover, in national contexts where HE has experienced market reforms, student data may become an important source of evidence for institutions wishing to demonstrate their competitiveness. User data demonstrating institutional effectiveness in terms of outcomes and quality could, therefore, be used to attract prospective students, as business intelligence for internal decision-making, and as centralised sources for inspection by accrediting bodies, policymakers and politicians that can be used to evaluate institutional outcomes, create ranked league tables, and award or withhold financial resources (Williamson, 2019).

If enacted, the potential for staff and institutional surveillance through user data would pose unique challenges to academic freedom in HE, particularly in contexts where academic educators' social media is already monitored.[47]

5.3. Academic freedom

About

Academic freedom refers to the freedom of HE workers to conduct inquiry and produce knowledge, and includes the freedom to make autonomous choices about teaching. Such choices include those relating to content, pedagogy, evaluation and assessment. Digital platforms may impact each of these areas by shaping academic decision-making or constraining educators' pedagogic autonomy in several ways. The key challenge here is the extent to which ownership of IP and copyright is considered a matter of academic freedom since academics cannot exercise academic freedom without control over the materials they produce.

46 https://www.privacycompany.eu/blogpost-en/new-dpia-for-the-dutch-government-and-universities-on-microsoft-teams-onedrive-and-sharepoint-online

47 Coe, J. (2023, 29 October). Michelle Donelan writes to UKRI over 'jobs for Hamas terrorist sympathisers. WonkHE: https://wonkhe.com/wonk-corner/michelle-donelan-writes-to-ukri-over-jobs-for-hamas-terrorist-sympathisers/

Limited user choice

When individual university staff and students use a digital platform, they must comply with the terms and conditions set by the agreement between platform proprietors and universities, which may restrict their academic freedom. They are expected to use platforms provided by their universities for studies and work, with little option to opt out of the platform's usage, data collection, or computation and other outputs of platforms. This becomes especially problematic when edtech platforms may be integrated with global Big Tech firms' underlying AI technologies, as with OpenAI powering the AI design assistant in Blackboard Learn Ultra. Only administrators or those responsible for license and data use agreements may have the professional discretion to make decisions about activating AI applications, if opt-out is possible at all. In the case of Turnitin's AI detection software, only concerted pushback by prestigious UK universities and associations forced the company to make opt-out possible.[48] In other words, even when a platform is already institutionalised, new features may be rolled out with limited user or even institutional choice.

Outsourced content generation

Various platforms enable institutions to outsource responsibility for producing course structure, content, and assessment. Our informants told us that academic labour is increasingly strained, with educators burdened by workload demands while universities look for scale and efficiency to maximise student enrolments. One solution sought by educators has been the acquisition of digital textbooks, courseware and associated online assessments, which provide a standardised set of content and materials, structure the pedagogic sequence of tasks, and streamline assessment, all with the promise of relieving academic workloads. Many of the largest educational publishers, which have increasingly focused on digital-first delivery via platforms, promote this model of teaching by courseware.

The standardised digital model is attractive to institutions that may see it as financially advantageous to outsource content creation and assessment to an accredited vendor rather than employ more academic staff. It's also financially advantageous to vendors who own the IP—the platform and the content—that institutions pay subscription fees to access.

During the Covid-19 pandemic, for example, the MOOC Coursera began offering the Coursera for Campus service, making it possible for individual institutions to license online courses produced by other institutions

48 Staton, B. (2023, 3 April). Universities express doubt over tool to detect AI-powered plagiarism. Financial Times: https://www.ft.com/content/d872d65d-dfd0-40b3-8db9-a17fea20c60c

as part of their online degree provision. Coursera for Campus has subsequently evolved into a suite of career-readiness courses intended to 'Deliver practical, job-relevant learning experiences with professional content and courses from university and industry experts'.[49] It provides students at individual institutions with access to course content provided by over 275 universities and industry partners, ready-making exercises, and 'micro-credential' professional certificates aligned with industry needs. By facilitating the licensing of partner courses and content, plus awarding industry-focused certificates, Coursera enables universities to outsource many aspects of their career-readiness programs, obviating the need for in-house academic autonomy in course organization and content preparation.

AI and automated course design

Edtech platforms have begun integrating AI functionality to enable the automated production of course content, exercises and assessments. For example, Anthology recently announced AI is now integrated into the Blackboard Learn Ultra platform to allow automatic generation of course structure, content, quizzes and tests.[50] Promoted as the first major LMS provider to incorporate generative AI, the platform produces a course structure based on the title, description, and learning objectives of a course, as well as tests, quizzes, and evaluation rubrics.

Features of the AI Design Assistant in Blackboard Learn Ultra.

Using simple inputs like a course name, description, or learning objectives, the AI Design Assistant can help with:

Simplifying course creation
The AI Design Assistant can recommend the structure of a course, along with titles for modules, descriptions, and even images based on course content, freeing instructors up to do what they do best – teach!

Content-based test generation
AI-powered algorithms analyze a document's content and quickly generate a diverse set of questions, which the instructor can review and edit to assess knowledge and understanding.

Rubric creation
Standardizing the rubric creation process with AI ensures consistency and fairness in evaluating student performance, in just a fraction of the time.

49 https://www.coursera.org/campus
50 https://www.anthology.com/ai-design-assistant

Royalty-free image sourcing
The AI Design Assistant provides royalty-free image recommendations based on the context of a course or document - so no more hunting for good visuals to make courses more engaging, and no need to worry about copyright infringement, either! (Anthology website)[51]

The clear implication of automated course design applications, should they become normalised, is an erosion of academic freedom in terms of teaching. In examples such as Blackboard Learn Ultra, the AI assistant can be enabled at an institutional level. Such a decision to enable automated course design would appear to reflect an institutional commitment to the positive value of AI-assisted pedagogy and curriculum development, raising questions for some about the ways in which university administrators perceive the value of academic labour in terms of pedagogic autonomy.[52] However, such decisions may be rarely made by high-level university administrators, as the governance of educational platforms is usually delegated to edtech or IT teams, while academics may have no say in those decisions at all.

Platforms with suggestions and nudges

Various platforms offer products with integrated analytics and suggestions for action to students and staff, which might have effects on professional autonomy (making pedagogic and other decisions) and academic freedom (e.g. suggesting what to read). One example is platforms that incorporate 'nudges' designed to prompt students to perform in a particular way, often without the explicit participation of an educator. When Anthology and Blackboard merged into a single company, they also aggregated datasets—in the marketing language, the deal was concerned with 'breaking down data silos' so as to generate better insights to support students. The then-Blackboard CEO claimed that the combined collection and analysis of many billions of data points from students on a weekly basis would facilitate the automated generation of 'nudges' to improve student performance.[53]

Automated nudges may also be employed to direct students towards relevant reading materials or to select course modules that they are most likely to succeed in based on predictive analytics of their academic trajectory.[54]

51 https://www.anthology.com/ai-design-assistant
52 Watkins, M. (2023, 17 September). Automation Arrives in the Classroom. Marc Watkins substack: https://marcwatkins.substack.com/p/automation-arrives-in-the-classroom
53 https://blog.blackboard.com/bringing-personalized-experiences-to-education-with-you/
54 Decuypere, M. and Hartong, S. (2023). Edunudge. *Learning, Media and Technology, 48*(1), 138-152.

Platform nudges may affect academic freedom in different ways. In the case of course selection nudges, they challenge academic freedom regarding choice about student admission. Systems that direct students towards specific recommended readings challenge academic control over course content and materials, even as such systems may also operate by extracting information from course leaders' resource lists to predict relevant texts. And nudges like those promoted by Blackboard appear to operate by a form of evaluation and assessment of student progress that works behind the backs of educators, automatically making pedagogic choices about resource appropriateness.

Platforms changing functionalities

A platform's technical affordances impact academic practice. They enable a particular kind of structure, social relations, communication, etc. In this respect, it could be argued that academic freedom is already limited since academics are not free to decide on how they teach as they are limited by the pedagogic options and restrictions that a platform imposes. However, proprietary platforms can also change things, as for example, as stated in Coursera's Terms of Use:

> *We are constantly changing and improving our Services. We may add or remove functions, features, or requirements, and we may suspend (to the extent allowed by applicable law) or stop part of our Services altogether. Accordingly, Coursera may terminate your use of any Service for any reason. (Coursera Terms of Use)*[55]

Likewise, Anthology claims that:

> *We may, without prior notice, change any Product; stop providing any Product or features of any Product, to you or to Users generally; or create usage limits for any Product. We may permanently or temporarily terminate or suspend your access to any Product without notice or liability for any reason, including if in our sole determination you violate any provision of these Terms, or for no reason. Upon termination for any reason or no reason, you continue to be bound by these Terms. (Anthology Terms of Use)*[56]

These cases may be understood as limiting academic freedom by constraining, impeding or even forbidding certain pedagogic actions, although, in practice, such changes would be only made in consultation with the institution providing the course. More simply, the structure

55 https://www.coursera.org/about/terms
56 https://www.anthology.com/trust-center/terms-of-use

and functionality of platforms shape, enable or restrict the pedagogic possibilities of educators in their teaching, and changes in functionality can consequently impact their teaching practices.

Challenges

We identified four key challenges regarding academic freedom: loss of professional autonomy; potential loss of institutional autonomy; constraints of technological lock-ins; and demands for new kinds of labour.

Challenge 1: Loss of professional autonomy

Platforms continuously develop their products and add new features. Some of these features include behavioural nudges and other recommendations that may limit educators' professional autonomy. An illustrative example is Instructure's stated ambitions to use extensive data mining, predictive analytics and AI to make automated recommendations and suggestions to educators and students. In this example, the value of the Instructure's 'data assets' for potential monetisation, twinned with its capacity to reshape teaching practices and learning processes, is rendered explicit.

Instructure's data mining ambitions

We have the most comprehensive database on the educational experience in the globe. So given that information that we have, no one else has those data assets at their fingertips to be able to develop those algorithms and predictive models. … What's even more interesting and compelling is that we can take that information, correlate it across all sorts of universities, curricula, etc, and we can start making recommendations and suggestions to the student or instructor in how they can be more successful. … it is first and foremost a platform for ML and AI, and we will deliver and monetise it by offering different functional domains of predictive algorithms and insights.[57, 58]

The introduction of outsourced content services, automated course design, and data-driven 'nudging' into edtech platforms represent significant challenges to educators' professional autonomy and academic

57 https://eliterate.us/instructure-plans-to-expand-beyond-canvas-lms-into-machine-learning-and-ai/
58 https://onedtech.philhillaa.com/p/instructurecon-2019-a-study-in-contrasts/

freedom. With outsourced content, educators are positioned as delivery agents for external materials, with little pedagogic discretion for decisions over appropriate curriculum. Automated content design is intended to support and assist educators by reducing the workload burden of course and content preparation, but it also supposes that significant aspects of academic labour can be replaced by highly efficient and cost-effective robotised processes. Notably, one AI course design assistant, the French edtech platform nolej, markets itself as being '100x faster and cheaper'.[59]

The introduction of nudging functionality into LMSs also suggests that teachers' academic freedom to evaluate and assess students may be delegated to software systems that decide what a student can or cannot do and what support they require based on digital traces of their activity. Algorithmic decisions are integrated into platforms and are not accessible to institutions or intelligible to staff. Companies like Anthology or Instructure can make highly consequential decisions about the functionality of their services that impact educators' work and students' experiences. Anthology, for example, has made the AI course design assistant in Blackboard Learn Ultra available by default, leaving it to institutional administrators to decide whether to enable the functionality or not, often in the absence of any sector-wide consensus.

Challenge 2: Potential loss of institutional autonomy

As online courses expand, universities agree on contracts that have the potential to affect their institutional autonomy. They may offer them alone or in partnership with OPM or MOOC platforms. It is stated that universities keep control over content. However, in the case of OPMs, the platform proprietor may restrict institutions' capacity to control their own curriculum offerings. For example, a study on OPMs reported a case where an OPM contract with Pearson to provide online courses 'prevents the university from making changes to curricula or concentrations without first appealing to Pearson'.[60]

It is not only about the autonomy regarding the course content and structure that is affected by platform arrangements but also decisions on resources, as discussed by a study of OPMs published by The Century Foundation:

59 https://nolej.io/
60 Hall, S. and Dudley, T. 2019, 12 September. Dear Colleges: Take Control of Your Online Courses. The Century Foundation: https://tcf.org/content/report/dear-colleges-take-control-online-courses/

The Century Foundation study of OPMs

A study by The Century Foundation from 2019 found that:

"Alarmingly, of the relevant contracts TCF analyzed, more than half (53 percent) guaranteed the OPM a share of the school's tuition revenue. Arrangements typically involved the OPM receiving roughly half of tuition, though it ranged from as high as 80 percent (Ed2Go, The Learning House OPM contracts) to as low as 35 percent (Univ. of Arizona-All Campus OPM contract)"[61]

Moreover, the study's analysis of relevant contracts found that:

In **41 percent** of contracts, the OPM was tasked with recruiting on the school's behalf; of contracts with clear length of agreement terms, **56 percent** last for five years or more.

27 percent of contracts locked in schools with strict exiting terms, e.g. requiring a years-in-advance termination notice and/or automatic renewals.

In **32 percent** of contracts, there were vague and/or no protections on the use of students' data and information; Some contracts appear to give OPMs the ability to profit off of student data.

In **68 percent** of contracts, the OPM was tasked with developing the course; and in **32 percent**, the OPM was tasked with also providing instruction.

While some of the contracts that TCF analyzed included provisions that allow the school to maintain control over program governance, revenue, and mission, many of the contracts endowed OPMs with enormous and at times comprehensive control over the services offered. For example:

Under the contract between UCLA and Trilogy to run a coding bootcamp through the university's extension school, UCLA is required to set the tuition price *as high as the market will bear*, and Trilogy has the right to veto the price set by UCLA.

Under the contract between the University of North Dakota (UND) and Pearson, UND is *prevented from making changes to curricula* without first appealing to Pearson, who then evaluates the effect of the proposed changes on enrollment.

Under the contract between Boise State University and Academic Partnerships (AP), Boise State is *required to give AP two years' notice* to keep its contract from auto-renewing for another three

61 https://tcf.org/content/about-tcf/tcf-analysis-70-university-opm-contracts-reveals-increasing-risks-students-public-education/

years. If Boise State manages to end the contract after the five-year term, it must *continue paying AP for each student* it secured that is still taking online courses.[62]

As the example of OPM contracts above indicates, institutional contracts often preclude institutions from making significant decisions regarding their courses, curriculum, and content. Contracts often contain clauses that lock institutions into long-term arrangements, with platform proprietors making it impossible to withdraw from an agreement or to bear serious financial penalties if they do so. In such cases, universities lose their institutional autonomy to platform companies' strategic and business priorities. In the European context, this may run counter to accepted agreements and declarations on university autonomy, which recognize the right of universities to determine their organisational and administrative structure, decide on priorities, manage their own budget, hire personnel and admit students, decide the content and forms of teaching and research.[63]

Part of this challenge is that institutional autonomy may be in tension with the financial priorities of edtech platforms. As the Council of Europe's 2019 declaration on academic freedom and institutional autonomy states:

> *Academic freedom and institutional autonomy are also threatened when financial support from individuals, private corporations, or institutional donors predominantly determines the focus of research and teaching and diminishes the public and democratic purposes of higher education.*[64]

In addition, the AI applications being built into edtech platforms depend on the infrastructures of global AI companies like OpenAI, and cannot be separated from the current expansion and consolidation of Big Tech power across industries and sectors. While HE institutions may have some autonomy to decide whether to activate an application like an AI course designer in their LMS, they have no autonomy at all to determine whether AI applications powered by Big Tech firms should be part of such systems.

62 https://tcf.org/content/about-tcf/tcf-analysis-70-university-opm-contracts-reveals-increasing-risks-students-public-education/

63 Eaton, S. and Uvalic-Trumbic, S. (2021, 26 June). HE institutional autonomy is under siege across the world. University World News: https://www.universityworldnews.com/post.php?story=20210622133956498

64 https://rm.coe.int/global-forum-declaration-global-forum-final-21-06-19-003-/16809523e5

Challenge 3: Layered lock-in

Platform and infrastructure arrangements can lead to layers of technological lock-in that constrain academic freedom in terms of teaching. For example, when a university contracts with an LMS supplier, like Anthology or Instructure, it enters into a long-term agreement that affects a wide range of everyday processes. The switching costs of changing from one provider to another may be prohibitive, and with Anthology and Instructure as perhaps oligopolistic in the LMS market in many regions and localities, those universities are likely to be locked into the ecosystem of either one or the other.

What is more, both Instructure and Anthology depend on the cloud computing infrastructure of Amazon Web Services (AWS) or other Big Tech cloud provider for computing power, data storage, analytics, and 'AI as a service' functionality, without which they could not run at the kind of scale required to maintain their market position. This means that while universities may be locked into LMS platforms, those platforms are also locked into AWS or another cloud infrastructure. The exercise of academic freedom can become contingent upon the layered platform and infrastructure arrangements that determine how a course can be taught.

User data generated from the interactions of individuals in universities may also be extracted from universities for storage and processing in AWS centres. As AI becomes increasingly common in edtech platforms, and accepted by administrators as a necessary part of everyday tasks such as course design and assessment, then further lock-ins will result as providers like Anthology become dependent on AI companies like OpenAI to provide the services they offer to universities. Once AI applications like course design assistants become part of the fabric of an institution, they may become impossible to remove, despite widespread criticism of the Big Tech AI companies' track record on critical issues like copyright protection.

Challenge 4: More work for universities

The proliferation of digital platforms and AI infrastructure in HE requires new forms of digital labour and demands institutions employ new kinds of specialists who can deal with complex issues like IP, copyright, data protection and privacy rights, as well as cybersecurity threats. These experts tend to have expertise from a corporate or legal background, while staff with educational competence may be kept out of critical conversations regarding edtech procurement or protections. Academics and students are often unaware of what is happening or may not be consulted regarding decisions that will ultimately impact their labour or learning. Important decisions that affect academic freedom to teach are made without their participation.

Universities often lack the expertise required to deal with the fast-changing landscape of edtech in ways that recognise the impact of platforms and infrastructures on academic work, not just its potential in financial or legal terms. The sector, therefore, needs new forms of competency, resources, and appropriate university organisation and structure to deal with issues, such as: procurement oversight and contracting; long-term vendor management; and monitoring software updates and switching off non-wanted features, including the automatic updates released under the continuous improvement model of cloud companies, as well as regular upgrades and new features that are introduced by platforms.

The labour implication is that HE institutions require a range of IT, data and governance capacity to manage platforms and data. However, in many cases, edtech companies encourage universities to outsource these services to them, as they are able to perform all the necessary checks and analyses. On the basis of promises of efficiency and labour-saving for institutions, edtech platforms engender further dependencies and lock-ins, with institutions less and less likely to employ in-house experts with the relevant capacities.

6. Conclusions and recommendations

Edtech platforms play a growing role in HE, affecting academic labour in various ways, including impacting their IP ownership and academic freedom. This study aims to identify potential risks for academic labour and describe key macro trends. We did not tackle contextual, specific and micro processes, which require further research.

The headline finding of this study is that the increasing digitalisation and platformisation of HE is resulting in a complex, messy combination of technical, legal and financial factors relating to academic IP and academic freedom, which are often complicated further by different governance and copyright regimes across national borders and individual institutions. As a result, responses to issues of academic IP and academic freedom in relation to edtech platforms are fragmented and context-dependent, with no sector-wide standards or rules, and minimal guidance for institutions on these matters when engaging in licensing or procurement. This raises the risk that academic IP may be exploited and academic freedom constrained as edtech platforms occupy an increasing role in HE systems.

This is a complex terrain, with little existing research or evidence of good practice that can be shared for the benefit of HE systems in different international regions. We hope this report catalyses further much-needed research, consultation, debate and action to address the challenge of edtech platforms to key aspects of academic labour such as IP ownership and academic freedom in teaching. Our recommendations to address these issues are:

- Further research should be conducted into specific national and regional issues related to digital technologies, IP and academic freedom in HE, with the aim of identifying specific contextual problems and potential good practice models that could be emulated in other contexts. Such research should focus on the key challenges identified in this report:
  - academic IP rights over content on platforms
  - the specific purposes for which edtech platforms collect user data
  - the implications of platforms for academic freedom in teaching
- Sector bodies, such as national research and education networks and regulatory organizations, should consult on creating standard quality assurance processes for procuring edtech platforms. Such consultations should involve experts with relevant expertise:

  - ethical procurement practice
  - quality assurance
  - vendor management strategy

- Universities should be more transparent in the agreement of contracts with digital education service providers, routinely publishing summaries of platform agreements in an accessible way for staff and students. This would include institutional transparency in terms of:
  - specific IP rights of staff
  - the IP claimed by institutions using the services
  - how user data are collected and processed, and which actors (institutions and vendors) will use the data for what purposes
- Unions should convene an ongoing sectoral debate on the impact of technology services, such as the effects of platforms and infrastructures on academic IP and academic freedom. This could be a route to developing advocacy campaigns related to academic labour in platformised HE.

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8. Appendix: Analysed documents

List of analysed material:

We analysed the following platform documentation:

Table 2. Platform documents analysed.

Virtual learning environments (VLEs) and Learning Management Systems (LMSs)		
Anthology (Blackboard)		
Document title	*Date of download*	*Link*
Terms of use	*29.8.2023*	*https://www.anthology.com/trust-center/terms-of-use*
Privacy statement	*29.8.2023*	*https://www.anthology.com/trust-center/privacy-statement*
U.S. State Privacy Notice	*29.8.2023*	*https://www.anthology.com/trust-center/us-state-privacy-notice*
Our approach to data privacy	*29.8.2023*	*https://www.anthology.com/trust-center/data-privacy-approach*
Product security statement	*29.8.2023*	*https://www.anthology.com/trust-center/security*
Hosting approach and client support model	*29.8.2023*	*https://www.anthology.com/trust-center/hosting-and-data-transfers*
Trustworthy AI approach	*29.8.2023*	*https://www.anthology.com/trust-center/trustworthy-ai-approach*
Empower Instructors with AI	*15.09.2023*	*https://www.anthology.com/ai-design-assistant*
Instructure (Canvas)		
Document title	*Date of download*	*Link*
Terms of use	*29.8.2023*	*https://www.instructure.com/policies/terms-of-use*
Product Privacy Notice	*29.8.2023*	*https://www.instructure.com/policies/privacy*

Institutions and educators privacy FAQs	*29.8.2023*	*https://www.instructure.com/en-gb/node/2306*
European Union Region Product Privacy Notice	*29.8.2023*	*https://www.instructure.com/policies/privacy/EU*
Data Processing Addendum	*29.8.2023*	*https://www.instructure.com/policies/data-processing*
Acceptable Use policy	*29.8.2023*	*https://www.instructure.com/policies/acceptable-use*
Acceptable use international policy	*29.8.2023*	*https://www.instructure.com/policies/intl-acceptable-use*

Massive Open Online Courses (MOOCs)

Coursera

Document title	*Date of download*	*Link*
Terms of Use	*30.8.2023*	*https://www.coursera.org/about/terms*
Privacy Notice	*30.8.2023*	*https://www.coursera.org/about/privacy*
U.S. State Privacy Laws Notice	*30.8.2023*	*https://www.coursera.org/about/privacy/ccpa*
Coursera Data Protection Addendum	*30.8.2023*	*https://www.coursera.org/about/privacy/data-protection-addendum*

edX

Document title	*Date of download*	*Link*
edX Terms of Service	*29.8.2023*	*https://www.edx.org/edx-terms-service*
edX Privacy Policy	*29.8.2023*	*https://www.edx.org/edx-privacy-policy*

FutureLearn

Terms and conditions	*30.8.2023*	*https://www.futurelearn.com/info/terms*
FutureLearn Privacy policy	*30.8.2023*	*https://www.futurelearn.com/info/terms/privacy-policy*
FutureLearn Code of conduct	*30.8.2023*	*https://www.futurelearn.com/info/terms/code-of-conduct*

Assessment

TurnItIn

Document title	*Date of download*	*Link*
Turnitin End-User License Agreement	*12.09.2023*	*https://www.turnitin.com/agreement.asp*
Turnitin Services Privacy Policy	*12.09.2023*	*https://help.turnitin.com/Privacy_and_Security/Privacy_and_Security.htm*
Turnitin Acceptable Use Policy	*12.09.2023*	*https://www.turnitin.com/privacy/acceptable-use-policy*

Infrastructure

Microsoft

Document title	*Date of download*	*Link*
Microsoft Privacy Statement	*06.10.2023*	*https://privacy.microsoft.com/en-gb/privacystatement*

Content exchange		
CourseHero		
Document title	Date of download	Link
Terms of Use	12.09.2023	https://www.coursehero.com/terms-of-use/
Privacy Policy	12.09.2023	https://www.coursehero.com/copyright/#/privacy-policy
Copyright Policy	12.09.2023	https://www.coursehero.com/copyright/#/
Honor Code	12.09.2023	https://www.coursehero.com/honor-code/
Academic Integrity Policies	12.09.2023	https://www.coursehero.com/academic-integrity-policies/

Table 3. YouTube videos on Anthology Inc.'s AI tools.

Document title	Date of download	Link
Anthology Inc.: There's more to Learn - New Artificial Intelligence features in Blackboard Learn Ultra	15.09.2023	https://www.youtube.com/watch?v=Bu9d7OeP1rk
Anthology Inc.: Anthology Announces AI-powered Course Building Tools	15.09.2023	https://www.youtube.com/watch?v=TWFnHI-wH2w
Jacob Spradlin: Auto-Generate Learning Modules with the AI Design Assistant in Blackboard Ultra Courses	15.09.2023	https://www.youtube.com/watch?v=P7PTKHIuqtU&list=PLw0_N9maMwdQFUvAMSHkpX5tiVai-smYC&index=1
Jacob Spradlin: Test Question Generation - AI Design Assistant Blackboard Ultra Course View	15.09.2023	https://www.youtube.com/watch?v=HbORtL2EU4Q&list=PLw0_N9maMwdQFUvAMSHkpX5tiVai-smYC&index=4

We analysed the following institutional policies:

Table 4. Institutional policies examined.

Document title	Date of download	Link
Purdue University - Courseware and Online Modules (S-19)	13.09.2023	https://www.purdue.edu/policies/academic-research-affairs/s19.html
Purdue University - Courseware and Online Modules (S-19)	13.09.2023	https://www.purdue.edu/policies/academic-research-affairs/s19.html
University of Aberdeen - Lecture capture FAQs	31.08.2023	https://www.abdn.ac.uk/staffnet/teaching/lecture-capture-faqs-11690.php#panel11782
University of Edinburgh - Policy on Exploitation of Intellectual Property Principles and Processes	31.08.2023	https://www.ed.ac.uk/sites/default/files/atoms/files/uoe_policy_on_commercialisation_of_ip.pdf
University of Edinburgh - Lecture recording policy	31.08.2023	https://www.ed.ac.uk/information-services/learning-technology/media-hopper-replay/help-and-support/frequently-asked-questions/lecture-recording-policy

University of Oxford - Frequently-asked questions regarding the Lecture Capture service	*31.08.2023*	*https://help.it.ox.ac.uk/replay/faq*
University of Cape Town - A privacy notice for UCT employees	*29.08.2023*	*https://uct.ac.za/media/7887*

We analysed the following national/sectorial documents:

Table 5. National and sectorial documents examined.

Document title	*Date of download*	*Link*
AFT and AAUP Principles for Higher Education Response to COVID-19	*13.09.2023*	*https://www.aaup.org/news/aft-and-aaup-principles-higher-education-response-covid-19#.XsK0IC2ZPPA*
ACCC Statement of issuses - Turnitin, LLC – proposed acquisition of Ouriginal Group AB	*12.09.2023*	*https://www.accc.gov.au/system/files/public-registers/documents/Turnitin%20-%20Ouriginal%20-%20Statement%20of%20Issues%20-%209%20September%202021.pdf*
ACCC will not oppose Turnitin's proposed acquisition of Ouriginal	*12.09.2023*	*https://www.accc.gov.au/media-release/accc-will-not-oppose-turnitins-proposed-acquisition-of-ouriginal*
VWV - Lecture recordings - a trap for the unwary	*31.08.2023*	*https://www.vwv.co.uk/news-and-events/blog/higher-education-law/lecture-recordings-trap-unwary*
UCU - Guidance on GDPR, moral & performance rights and accessibility in recorded lectures/lessons	*31.08.2023*	*'https://www.ucu.org.uk/media/11173/Guidance-on-GDPR-moral--performance-rights-and-accessibility-in-recordedlectureslessons/*
JISC - Legal considerations for recording lectures	*31.08.2023*	*https://beta.jisc.ac.uk/guides/legal-considerations-for-recording-lectures*
HEPI - Who owns online lecture recordings?	*31.08.2023*	*https://www.hepi.ac.uk/2021/11/30/who-owns-online-lecture-recordings/*

We reviewed the following news items:

Table 6. News items reviewed.

Document title	*Date of download*	*Link*
Inside HigherEd - Suing John Doe Students Over Copyright	*12.09.2023*	*https://www.insidehighered.com/news/2022/03/18/suing-students-who-shared-exams-online-identify-them*
CBC News - Student-help site Course Hero raises plagiarism, copyright concerns	*12.09.2023*	*https://www.cbc.ca/news/canada/montreal/student-help-site-course-hero-raises-plagiarism-copyright-concerns-1.3035196*
The Panther - Course Hero hands over student identities to Chapman professor following lawsuit	*12.09.2023*	*https://www.thepanthernewspaper.org/chapman-university-v-press/l9fzv42ezxaxhse0u95lu0ylvge9z1-hcmnp*
The Panther - Course Hero hands over student identities to Chapman professor following lawsuit	*13.09.2023*	*https://www.thepanthernewspaper.org/chapman-university-v-press/l9fzv42ezxaxhse0u95lu0ylvge9z1-hcmnp*

The Century Foundation - TCF Analysis of 70+ University-OPM Contracts Reveals Increasing Risks to Students, Public Education	*29.08.2023*	*https://tcf.org/content/about-tcf/tcf-analysis-70-university-opm-contracts-reveals-increasing-risks-students-public-education/*
Pesquisa FAPESP – A focus on privacy	*29.08.2023*	*https://revistapesquisa.fapesp.br/en/a-focus-on-privacy/*
EdTech Review - British Education Group Pearson Sells OPM Arm to Private Equity Firm Regent LP	*29.08.2023*	*https://www.edtechreview.in/news/british-education-group-pearson-sells-opm-arm-to-private-equity-firm-regent-lp/*
Guardian Australia - 'No actual teaching': alarm bells over online courses outsourced by Australian universities	*29.08.2023*	*https://www.theguardian.com/australia-news/2023/mar/07/no-actual-teaching-alarm-bells-over-online-courses-outsourced-by-australian-universities*
HigherEd - A federal watchdog said OPMs need more oversight. Here's how that will affect colleges and companies.	*29.08.2023*	*https://www.highereddive.com/news/a-federal-watchdog-said-opms-need-more-oversight-heres-how-that-will-affe/624530/*
Reuters - Analysis: Class led by dead professor spotlights COVID-era content rights	*29.08.2023*	*https://www.reuters.com/article/us-global-tech-rights-analysis-trfn-idUSKBN2A521B*
Inside HigherEd - IP Problems	*13.09.2023*	*https://www.insidehighered.com/news/2020/05/19/who-owns-all-course-content-youre-putting-online*
Inside HigherEd - Balancing Student Privacy and Open Access	*13.09.2023*	*https://www.insidehighered.com/news/2022/02/15/course-hero-contends-student-privacy-concerns*
EdSurge - Turnitin to Be Acquired by Advance Publications for $1.75B	*12.09.2023*	*https://www.edsurge.com/news/2019-03-06-turnitin-to-be-acquired-by-advance-publications-for-1-75b*
Times Higher Education - Academics fret as Turnitin nears monopoly on plagiarism checks	*12.09.2023*	*https://www.timeshighereducation.com/news/academics-fret-turnitin-nears-monopoly-plagiarism-checks*
eLiterate - Instructure: Plans to expand beyond Canvas LMS into machine learning and AI	*15.09.2023*	*https://eliterate.us/instructure-plans-to-expand-beyond-canvas-lms-into-machine-learning-and-ai/*
EdSurge - As Instructure Changes Ownership, Academics Worry Whether Student Data Will Be Protected	*15.09.2023*	*https://www.edsurge.com/news/2020-01-17-as-instructure-changes-ownership-academics-worry-whether-student-data-will-be-protected*

Other documents reviewed:

Table 7. Other documents reviewed:.

Document title	*Date of download*	*Link*
Mount Saint Vincent University, Senate minutes from March 6, 2006	*15.09.2023*	*https://www.msvu.ca/wp-content/uploads/2020/05/MinutesMar606.pdf*
United States Court of Appeals, 2009 - Vanderhye v. iParadigms, LLC	*12.09.2023*	*https://caselaw.findlaw.com/court/us-4th-circuit/1248473.html*
Ethical EdTech – Letter to Instructure	*15.09.2023*	*https://ethicaledtech.info/wiki/Meta:Letter_to_Instructure*

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Educational platforms

Challenges to intellectual property and academic freedom of higher education teachers

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April 2024

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