

STUDENTS, POWER, AND TECHNOLOGY

Mona Sloane[†], Ella Duus^{††}, and Bertrall Ross^{†††}

ABSTRACT

Digital technology and artificial intelligence (AI) systems have become deeply integrated into the operations and pedagogies of universities. Despite being pervasive and creating digital footprints for students that may last a lifetime, these technologies remain ungoverned by its key stakeholder group: students. This development coincides with a steady decline in student power in university administration as evidenced by recently changed state laws, structurally hindering student participation in technology governance.

TABLE OF CONTENTS

I. INTRODUCTION	1315
II. THE ROLE OF DIGITAL TECHNOLOGY IN STUDENT LIFE.....	1317
III. TECHNOLOGY GOVERNANCE IN UNIVERSITIES.....	1328
IV. THE MARGINALIZATION OF STUDENTS FROM UNIVERSITY GOVERNANCE	1335
V. REMEDYING THE PROBLEM OF STUDENT EXCLUSION FROM UNIVERSITY TECHNOLOGY GOVERNANCE.....	1347
VI. CONCLUSION.....	1359

I. INTRODUCTION

The 2024 arrival of generative artificial intelligence (AI) systems, such as OpenAI's ChatGPT, Google's Gemini, or Anthropic's Claude, on U.S. campuses threw administrators and faculty into crisis: suddenly, students could use this technology to complete almost all course assignments, undermining pedagogical approaches and assessment procedures that had been built over decades. In response, most universities hastily installed working groups or

DOI: <https://doi.org/10.15779/Z38JS9HB12>

© 2025 Mona Sloane, Ella Duus and Bertrall Ross.

[†] Assistant Professor of Data Science and Media Studies, University of Virginia; Faculty Co-Lead Digital Technology for Democracy Lab, University of Virginia; Director, Sloane Lab.

^{††} Graduate Student, Frank Batten School of Leadership and Public Policy, University of Virginia; Research Assistant, Sloane Lab.

^{†††} Professor of Law, University of California, Berkeley, School of Law; Director, Edley Center on Law & Democracy.

committees tasked with creating usage and policy recommendations, typically focused on ensuring plagiarism could be curbed, following paternalistic and punitive approaches to this technology. Additionally, most of these committees and working groups were composed of faculty and administrators, centering their concerns, rather than taking student perspectives into account.

While generative AI is often seen as the cause of fundamental changes in higher education learning, it brings into sharp relief a more important and structural issue that has been brewing since the 1960s: the systematic decline of student power on public university boards and participation in university governance, paired with the rapid growth of digital technology in student life and learning.

Although students constitute a key stakeholder group on campuses, they are increasingly excluded from exercising agency in the university context, especially when it comes to the digital technologies they are forced to use to participate in campus life, access essential services, and engage meaningfully in the classroom. Increasingly, these technologies involve privacy-invasive data collection and harbor the risk of creating student data footprints that are consumed by AI systems in a competitive AI training data market in which data is an increasingly valuable commodity. An absence of student governance of digital technologies poses the risk of coercing students into being profiled, potentially affecting how future AI systems assess them in high-stakes situations, such as pursuing a job, loan, work visa, or insurance.

In this Article, we describe and analyze the interlocking trends of growing pervasive digital technology on campuses and rapidly declining student participation in university governance, including technology governance. We contextualize these entangled developments with the history of student participation in university administration and shared governance. We argue that justifications for student exclusion or marginalization from university governance are superficial and cause universities to miss out on leveraging students' comparative advantage as early technology adopters and active users while violating students' agency and their distinct need for intellectual privacy. We build on decision-making theory to suggest that excluding students from governance will lead to worse technology procurement, innovation, and regulatory outcomes and propose the Student Technology Council (STC) as a new model for addressing this risk.

In Part II, we describe how data-harvesting technologies have become integral to student life inside and outside of the classroom. We also show how universities have ceded power over technology governance to third-party vendors, changing how students interact with the institution and often violating their privacy expectations without providing proof of the added benefit of the newly procured digital tools.

In Part III, we contrast these findings with an analysis of current technology governance approaches at universities, most of which grew out of corporate information technology (IT) governance approaches that are decentralized today. These IT governance approaches, which are administrator- and faculty-led, rely on incorrect assumptions and incomplete assessments about student technology use and privacy expectations.

In Part IV, we converge on the idea of the marginalized student in university governance, describing how the current state of student exclusion from core governance work and technology decisions is at odds with the historically powerful role students held at universities from the beginning. By surveying the history of student power, we find that students have historically gained structural inclusion in governance after mobilizing as a distinct political group, such as in protests. In the United States, student power and governance participation increased after protests in the 1960s. However, that power has since been rolled back, particularly through state laws governing the composition of public university boards and changes to the student-university relationship, all toward a model of contracting parties whereby students are positioned as buyers of an educational product.

In Part V, we argue that there is no legal basis for excluding students from technology governance and that decision-making theory holds that continuing on this trajectory will cause worse technology and governance outcomes for universities writ large. We conclude the paper by suggesting the installment of STCs, elected bodies of students that advise administrators, faculty, and departmental and cross-university committees on issues and questions pertaining to technology procurement, innovation, and governance by issuing recommendations and opinions and by engaging the student body directly in technology conversations. The STC would give students a formal voice in shaping university technology decisions and ensure their expertise and well-being are prioritized. Ultimately, such a participatory form of governance can leverage students' backgrounds, lived technology experiences, and specific privacy expectations to enable better-informed and legitimate technology decisions on technology procurement, innovation, and governance, positioning students as co-governors rather than marginalizing their expertise and agency.

II. THE ROLE OF DIGITAL TECHNOLOGY IN STUDENT LIFE

Across American higher education institutions, data-intensive technologies are embedded into every aspect of campus life and learning, affording third-party technology vendors outsized power and control over the intimate lives of students, fundamentally changing how they interact with the

institution, and posing potential privacy risks with oftentimes nebulous benefits. University Wi-Fi networks, internet-connected devices, and sensors feed constant streams of data into predictive analytics platforms, AI-powered software, and learning management systems (LMSs). Administrators and product vendors promote these technologies as mechanisms to optimize resource use, personalize instruction, and improve educational quality. Universities accordingly collect increasingly granular student information and procure systems to make decisions and interventions based on that data. For example, some schools have gone so far as pinging students' phone locations to track class attendance¹ or requiring students to wear Fitbits for a physical education course.² Indeed, universities utilize technology both outside and inside the classroom.

Even before students set foot on campus, higher education institutions increasingly leverage technology to shape the student experience. For example, universities create profiles on prospective students based on their demographics, financial background, application, and interest forms from standardized tests.³ They then use predictive analytics to calculate a student's "demonstrated interest" and the amount of financial aid needed to attract a student.⁴ Once on campus, algorithms help curate the emails students receive, the courses recommended to them, the real-time alerts sent to advisors monitoring their academic performance and well-being, and the extracurriculars, scholarships, and opportunities that are shared with them.⁵ Even when students leave the university, their data is still used. Technologies like Degree Compass at Austin Peay State University permanently retain historical grade data to compare with current student transcripts and recommend classes.⁶ These systems optimize for metrics that improve

1. Machaella Reisman, *University Use of Big Data Surveillance and Student Privacy*, 48 FLA. ST. U. L. REV. 559, 564–65 (2021).

2. Jonathan Root, *How Fitbit Helps a Conservative Evangelical College Monitor Students' Bodies for Christ*, RELIGION DISPATCHES (Mar. 10, 2016), <https://religiondispatches.org/2016/03/10/how-fitbit-helps-conservative-evangelical-college-monitor-students-bodies-christ>.

3. See Victor M.H. Borden & Hamish Coates, *Learning Analytics as a Counterpart to Surveys of Student Experiences*, 2017 NEW DIRECTIONS HIGHER EDUC. 89, 90.

4. Tim Lloyd, *How College Applications Change in the Era of Big Data*, MARKETPLACE (Jan. 14, 2014), <https://www.marketplace.org/story/2014/01/14/how-college-applications-change-era-big-data>; Maggie McGrath & Matt Schiffrin, *The Invisible Force Behind College Admissions*, FORBES (July 30, 2014), <https://www.forbes.com/sites/maggiemcgrath/2014/07/30/the-invisible-force-behind-college-admissions/>; LINDSAY WEINBERG, SMART UNIVERSITY: STUDENT SURVEILLANCE IN THE DIGITAL AGE 57–59 (2024).

5. WEINBERG, *supra* note 4, at 1, 3, 17–18, 57–59.

6. MANUELA EKOWO & IRIS PALMER, THE PROMISE AND PERIL OF PREDICTIVE ANALYTICS IN HIGHER EDUCATION: A LANDSCAPE ANALYSIS 9 (2016), <https://files.eric.ed.gov/fulltext/ED570869.pdf>.

colleges' rankings and state performance-based funding, such as students' duration of study and retention rate.⁷ They allow universities to predict and manage a more expected future and stable student population, while improving their rankings and maintaining funding.⁸

Within the classroom, students' learning is mediated by technology, too. This includes LMSs, digital dashboards that track student performance, adaptive learning tools, automated feedback systems, and online proctoring services such as Respondus⁹ and ProctorU.¹⁰ Faculty are increasingly asked to use LMSs to integrate digital learning materials, assignments, grades, discussion boards, and video and audio recordings. For example, faculty at the City University of New York (CUNY) now require all synchronous and asynchronous online classes to be delivered through the LMSs Brightspace or Blackboard.¹¹ This represents a shift toward modular, data-generating forms of instruction that can be more easily monitored and analyzed. All the aforementioned tools track and record minute student data, including their keystrokes, time spent on a quiz, or movement during an exam.¹² Several universities, including Texas A&M¹³ and the University of Arizona,¹⁴ are even

7. PAM ARROWAY, GLENDA MORGAN, MOLLY O'KEEFE & RONALD YANOSKY, *LEARNING ANALYTICS IN HIGHER EDUCATION* 10 (2016), <https://library.educause.edu/~media/files/library/2016/2/ers1504la>.

8. See Neil Selwyn, *What's the Problem with Learning Analytics?*, 6 J. LEARNING ANALYTICS 11, 13–14 (2019).

9. *LockDown Browser*, RESPONDUS, <https://web.respondus.com/he/lockdownbrowser> (last visited May 30, 2025).

10. PROCTORU, <https://www.proctoru.com> (last visited May 30, 2025).

11. See *Policy for Use of a Learning Management System for Online Classes*, CUNY, <https://commons.hostos.cuny.edu/edtech/policy/policy-for-use-of-a-learning-management-system-for-online-classes/> (last visited Aug. 10, 2025).

12. Zak Vescera, *Canvas Is Tracking Your Data: What Is UBC Doing with It?*, UBYSSSEY (Mar. 27, 2019), <https://ubyssey.ca/features/double-edged-sword/>; Shanay Murdock, *How Do I Track Student Activity in My Course?*, FSU (Oct. 23, 2024), <https://support.canvas.fsu.edu/kb/article/893-how-do-i-track-student-activity-in-my-course/>; see E.A. Kochegurova & R.P. Zateev, *Hidden Monitoring Based on Keystroke Dynamics in Online Examination System*, 48 PROGRAMMING & COMPUT. SOFTWARE 385, 386 (2022); Mario Garcia Valdez, Juan-J. Merelo, Amaury Hernandez Aguila & Alejandra Mancilla Soto, *Mining of Keystroke and Mouse Dynamics to Increase the Engagement of Students with Programming Assignments*, 829 STUD. COMPUTATIONAL INTEL. 41, 57–58 (2019); Haotian Li, Min Xu, Yong Wang, Huan Wei & Huamin Qu, *A Visual Analytics Approach to Facilitate the Proctoring of Online Exams*, CHI '21: PROC. OF THE 2021 CHI CONF. ON HUM. FACTORS COMPUTING SYS. 1, 15 (May 2021).

13. Hannah Conrad, *Texas A&M Researchers Partner with MoodMe to Enhance Facial Analysis*, TEX. A&M UNIV. ENG'G (Aug. 5, 2019), <https://engineering.tamu.edu/news/2019/08/texas-am-researchers-partner-with-moodme-to-enhance-facial-analysis.html>.

14. *Using Facial Recognition Software to Measure Emotions*, UNIV. ARIZ. ELLER COLL. MGMT. (Jan. 3, 2020), <https://eller.arizona.edu/news/2020/01/using-facial-recognition-software-measure-emotions>.

researching the use of AI for emotion recognition to assess students' attentiveness and emotional responses during instruction.

The implementation of technology-based instruction has allowed pedagogical decisions to be increasingly influenced by institutional priorities, such as course completion rates, student satisfaction rates, and the cost per student. The emergence of generative AI tools has further complicated the role of technology in education. Instructors must now contend with the lure of AI detection software as well as AI-assisted and fully automated grading tools, despite ethical and pedagogical concerns about generative AI hallucinations and AI's inability to appropriately evaluate context, creativity, and nuance.¹⁵ Instructors are also tasked with "AI-proofing" assignments and assessments, leading to professor- and course-specific AI-use policies which create a fragmented learning environment for students who must navigate varying AI policies from course to course.¹⁶ The pedagogical implications of generative AI also remain under-researched, but emerging scholarship suggests that many AI lesson plan generators embed outdated educational methods which limit academic dialogue and student freedom.¹⁷ The rapid adoption of such novel and under-examined technology across classrooms reflects an impulse of higher education institutions that more data, more automation, and more rapid adoption of emerging, unexamined technologies inherently improve student outcomes and learning experiences.

Beyond classroom instruction, technology is integrated into university operations and thus student life. Campus infrastructure increasingly relies on network systems that automate access and facility management. Students routinely use identification cards or mobile credentials to access dormitories, academic buildings, dining halls, recreation facilities, and libraries. Many schools have integrated technology into dormitories, such as Amazon Echo Dots and Wi-Fi,¹⁸ by default. Traffic through university Wi-Fi is not private

15. See Yuhan Gao, *AI and Auto-Grading in Higher Education: Capabilities, Ethics, and the Evolving Role of Educators*, OHIO ST. ASC OFF. OF DISTANCE EDUC. (July 15, 2025), <https://ascode.osu.edu/news/ai-and-auto-grading-higher-education-capabilities-ethics-and-evolving-role-educators>.

16. See Christopher Rim, *How Ivy League Schools Are Navigating AI in the Classroom*, FORBES (July 7, 2025), <https://www.forbes.com/sites/christopherrim/2025/07/07/how-ivy-league-schools-are-navigating-ai-in-the-classroom/>.

17. See Bodong Chen, Jiayu Cheng, Chen Wang & Vivian Leung, *Pedagogical Biases in AI-Powered Educational Tools: The Case of Lesson Plan Generators*, 30 SOC. INNOVATIONS J. 2–3 (2025).

18. See *Amazon Echoes to Be Installed in Dorms*, UTD MERCURY (Apr. 15, 2019), <https://utdm Mercury.com/amazon-echoes-to-be-installed-in-dorms/>; Molly Price, *Alexa, Time for Class: How One University Put an Echo Dot in Every Dorm Room*, CNET (Aug. 13, 2019), <https://www.cnet.com/home/smart-home/features/alexa-time-for-class-how-one-university-put-an-echo-dot-in-every-dorm-room/>; Reisman, *supra* note 1, at 565.

and can be monitored.¹⁹ Each swipe, tap, device use, or signal gives universities and third-party vendors access to students' locational data, habits, behaviors, and activities on a day-to-day basis.²⁰ Some even track dining hall entry and time spent eating as a measure of social connectedness, flagging students for intervention if they appear isolated.²¹ Technologies are also used in campus security, such as surveillance cameras, emergency alert systems, access control tools, and facial recognition software. Several universities, including Columbus State University, Florida International University, Iowa State University, the University of Alabama, the University of Illinois, and the University of Wisconsin, utilize facial recognition technology.²² These operational systems, although aimed at enhancing convenience or safety, contribute to the everyday monitoring of students.

Research suggests that students generally express a high level of trust in their institutions, particularly nonprofit institutions.²³ Students distinguish between data collection in commercial contexts versus educational ones, assuming universities operate under a duty of care.²⁴ However, students also view their relationships with their universities as transactional. Students accept their disclosure of data as part of their relationship with their university.²⁵ This

19. David Gafef, *The New Hall Monitor*, INSIDE HIGHER ED (July 10, 2024), <https://www.insidehighered.com/opinion/views/2024/07/10/when-you-use-campus-wi-fi-whos-watching-and-how-opinion>.

20. WEINBERG, *supra* note 4, at 69–70, 73, 77; Reisman, *supra* note 1, at 563–65.

21. Vimal Patel, *Are Students Socially Connected? Check Their Dining-Hall-Swipe Data*, CHRON. HIGHER EDUC. (Apr. 9, 2019), <https://www.chronicle.com/article/are-students-socially-connected-check-their-dining-hall-swipe-data/>; Nicholas A. Bowman, Lindsay Jarratt, Linnea A. Polgreen, Thomas Kruckeberg & Alberto M. Segre, *Early Identification of Students' Social Networks: Predicting College Retention and Graduation via Campus Dining*, 60 J. COLL. STUDENT DEV. 617, 620–22 (2019); see WEINBERG, *supra* note 4, at 73.

22. *Stop Facial Recognition on Campus*, FIGHT FOR THE FUTURE, campus.banfacialrecognition.com/ (last visited Aug. 12, 2025).

23. See, e.g., Kyle M.L. Jones, Andrew Asher, Abigail Gobin, Michael R. Perry, Dorothea Salo, Kristin A. Briney & M. Brooke Robertshaw, *"We're Being Tracked at All Times": Student Perspectives of Their Privacy in Relation to Learning Analytics in Higher Education*, 71 J. ASS'N INFO. SCI. & TECH. 1044, 1053–54 (2020); Jasmine Park & Amelia Vance, *Data Privacy in Higher Education: Yes, Students Care*, EDUCAUSE REV. (Feb. 11, 2021), <https://er.educause.edu/articles/2021/2/data-privacy-in-higher-education-yes-students-care>; Melissa Ezarik, *Data Collection Comforts: Most Students Trust Their Colleges*, INSIDE HIGHER ED (Aug. 16, 2021), <https://www.insidehighered.com/news/2021/08/17/nine-ways-raise-awareness-about-student-data-and-data-privacy>.

24. Kyle M.L. Jones, Alan Rubel & Ellen LeClere, *A Matter of Trust: Higher Education Institutions as Information Fiduciaries in an Age of Educational Data Mining and Learning Analytics*, 71 J. ASS'N INFO. SCI. & TECH. 1227, 1230 (2019).

25. See Kyle M.L. Jones, Abigail Gobin, Michael R. Perry, Mariana Regalado, Dorothea Salo, Andrew D. Asher, Maura A. Smale & Kristin A. Briney, *Transparency and Consent: Student Perspectives on Educational Data Analytics Scenarios*, 23 LIBRS. & ACAD. 485, 499 (2023); Sharon

perceived lack of choice may be representative of the pressure that universities place on students to use campus technology. As more campus infrastructure is controlled through digital technology, students have fewer recourses to choose not to use digital technology. For example, students may not be able to use prepaid dining dollars on meal plans without downloading the GrubHub app. Yet doing so exposes students to intensive data collection: GrubHub collects and shares geolocation and behavioral data to deliver targeted advertisements.²⁶ Opting out of such on-campus technologies can mean forgoing basic services, while opting in subjects students to invasive tracking.

Universities do not always provide information to students about how technology is used or what data is collected and shared. At the University of North Carolina, attendance tracking sensors from SpotterEDU were installed without notification to faculty or students, causing mass confusion and leading to one dean physically removing a sensor.²⁷ In many cases, higher education institutions have failed to promote informed consent practices within and outside of classrooms.²⁸ For example, in 2022, George Washington University apologized to students, staff, and faculty for monitoring their locations without obtaining consent.²⁹

Universities have also used technologies to supplement in-person services offered on campus. Many colleges offer mental health apps such as Welltrack to students for free.³⁰ The app prompts students to log emotions and upsetting experiences through tools like the “Thought Diary.”³¹ This data is then aggregated and presented in real-time dashboards for university

Slade, Paul Prinsloo & Mohammad Khalil, *Learning Analytics at the Intersections of Student Trust, Disclosure and Benefit*, 2019 9TH INT’L LEARNING ANALYTICS & KNOWLEDGE CONF. 235, 240.

26. *Privacy Policy*, GRUBHUB, <https://www.grubhub.com/legal> (last visited July 8, 2025).

27. Wesley Jenkins, *Some Colleges Are Using Beacon Technology to Track Athletes’ Attendance. Is That Ethical?*, CHRON. HIGHER EDUC. (Nov. 7, 2019), <https://www.chronicle.com/article/some-colleges-are-using-beacon-technology-to-track-athletes-attendance-is-that-ethical/>;

Drew Harwell, *Colleges Are Turning Students’ Phones into Surveillance Machines, Tracking the Locations of Hundreds of Thousands*, WASH. POST (Dec. 24, 2019), <http://www.washingtonpost.com/technology/2019/12/24/colleges-are-turning-students-phones-into-surveillance-machines-tracking-locations-hundreds-thousands/>.

28. Kyle M.L. Jones, *Learning Analytics and Higher Education: A Proposed Model for Establishing Informed Consent Mechanisms to Promote Student Privacy and Autonomy*, 16 INT’L J. EDUC. TECH. HIGHER EDUC. 8–9 (2019); R.J. Connelly, *Intentional Learning: The Need for Explicit Informed Consent in Higher Education*, 49 J. GEN. EDUC. 211, 225–29 (2000).

29. Angela Brown, *University Apologizes for Data Project That Monitored Students Location*, NAT’L DESK (Feb. 21, 2022), <https://thenationaldesk.com/news/americas-news-now/university-apologizes-for-not-informing-campus-wide-community-it-was-collecting-their-data>.

30. WEINBERG, *supra* note 4, at 83–84, 91; see *Give Your Campus a Boost*, WELLTRACK BOOST, <https://welltrack-boost.com/higher-education/> (last visited May 30, 2025).

31. WELLTRACK BOOST, <https://welltrack-boost.com> (last visited May 30, 2025).

administrators.³² A Welltrack sales representative, alongside promotional materials, describes the app as a solution to the problem of the “overutilization” of campus mental health resources.³³ In this way, technology implementation on campus may be driven by resource constraints instead of concern for students. For example, San Jose State University’s (SJSU) 2013 partnership with the online education company Udacity was framed as a way to reduce costs, claiming to offer students “college classes for credit from an accredited university at a very affordable price of \$150 per course.”³⁴ SJSU and Udacity entered into a revenue-sharing agreement, reflecting a financial incentive to scale up online instruction.³⁵ SJSU ultimately suspended the program due to disappointing outcomes: pass rates ranged from just 20 to 44 percent, compared to around 75 percent in the equivalent face-to-face classes.³⁶

Students often lack the technology, data, and privacy literacy needed to critically assess or assert preferences about digital technologies on campus.³⁷ Structural barriers to transparency, such as opacity about what technologies were procured and deployed, complex privacy policies,³⁸ and limited access to information from universities make it difficult for students to understand what technologies are in use and how their data is collected or used. Despite informational gaps, students often do express privacy concerns that align with established privacy principles, including concerns about data granularity, access, and secondary use.³⁹ Generally, many Americans lack the knowledge and autonomy required to meaningfully consent to data collection, casting doubt on current consent frameworks.⁴⁰ Still, students do act on their concerns: at Virginia Commonwealth University, when students learned about a new attendance tool that analyzes student Wi-Fi connectivity, over 50 percent of students opted out within the two-month window.⁴¹

32. WEINBERG, *supra* note 4, at 108.

33. *Id.*; *Welltrack Connect for Universities*, WELLTRACK CONNECT, <https://welltrack-connect.com/universities> (last visited May 30, 2025).

34. Pat Lopes Harris, *SJSU and Udacity Partnership*, SJSU NEWSCENTER (Jan. 15, 2013), <https://blogs.sjsu.edu/newsroom/2013/sjsu-and-udacity-partnership/>.

35. *Id.*

36. Gregory Ferenstein, *San Jose’s Bold Experiment in Online Ed Disappoints, Suspends Pilot with Udacity*, TECHCRUNCH (July 19, 2013), <https://techcrunch.com/2013/07/19/san-jose-states-bold-experiment-in-online-ed-disappoints-suspends-pilot-with-udacity/>.

37. Park & Vance, *supra* note 23.

38. *Id.*

39. Jones et al., *supra* note 23, at 1051–53.

40. JOSEPH TUROW, YPHTACH LELKES, NORA A. DRAPER & ARI EZRA WALDMAN, AMERICANS CAN’T CONSENT TO COMPANIES’ USE OF THEIR DATA 8–14 (2023), https://www.asc.upenn.edu/sites/default/files/2023-02/Americans_Can%27t_Consent.pdf.

41. Reisman, *supra* note 1, at 590–91.

Students also bear the burden of discrimination or surveillance perpetuated by digital technologies implemented at universities.⁴² At Temple University, an early-alert system was designed in part by a former criminologist who previously worked on recidivism prediction tools, raising concerns about the application of carceral logic to educational settings.⁴³ Similarly, proctoring services are known to flag people of color and people with disabilities at a higher rate, singling these individuals out for punitive measures.⁴⁴ These technologies reflect broader demonstrated racial bias in facial and emotion recognition technologies, many of which exhibit higher error rates when applied to non-White subjects.⁴⁵

Moreover, increased surveillance can also influence students' behavior and sense of autonomy. Students reported modifying their use of campus resources in response to monitoring technologies, such as self-censoring their searches on campus Wi-Fi.⁴⁶ Surveillance during assessments through proctoring software can lead students to alter their test-taking behaviors out of fear of triggering automated flags, which worsens testing conditions and causes significant anxiety.⁴⁷ Similarly, the presence of facial recognition or emotion recognition systems in classrooms and public spaces may cause students to change their behavior and activities.⁴⁸ These effects are not evenly distributed:

42. Chris Gilliard & Neil Selwyn, *Automated Surveillance in Education*, 5 POSTDIGITAL SCI. & EDUC. 195, 201–02 (2023).

43. See EKOWO & PALMER, *supra* note 6, at 8.

44. Simon Coghlan, Tim Miller & Jeannie Paterson, *Good Proctor or “Big Brother”? Ethics of Online Exam Supervision Technologies*, 34 PHIL. & TECH. 1581, 1591–92 (2021); Lindsay McKenzie, *Proctoring Tool Failed to Recognize Dark Skin, Students Say*, INSIDE HIGHER ED (Apr. 5, 2021), <https://www.insidehighered.com/quicktakes/2021/04/06/proctoring-tool-failed-recognize-dark-skin-students-say>; Deborah R. Yoder-Himes, Alina Asif, Kaelin Kinney, Tiffany J. Brandt, Rhiannon E. Cecil, Paul R. Himes, Cara Cashon, Rachel M.P. Hopp & Edna Ross, *Racial, Skin Tone, and Sex Disparities in Automated Proctoring Software*, 7 FRONTIERS EDUC. 4–8 (2022); Shea Swauger, *Software That Monitors Students During Tests Perpetuates Inequality and Violates Their Privacy*, MIT TECH. REV. (Aug. 7, 2020), <https://www.technologyreview.com/2020/08/07/1006132/software-algorithms-proctoring-online-tests-ai-ethics/>; Katie Ignatowski, *Surveillance Tech Is Wrongly Accusing Disabled Students of Cheating on Tests*, TRUTHOUT (June 9, 2022), <https://truthout.org/articles/surveillance-tech-is-wrongly-accusing-disabled-students-of-cheating-on-tests/>.

45. Michael Kwet & Paul Prinsloo, *The ‘Smart’ Classroom: A New Frontier in the Age of the Smart University*, 25 TEACHING HIGHER EDUC. 510, 519 (2020).

46. Jones et al., *supra* note 23, at 1052.

47. Annika Pokorny, Cissy J. Ballen, Abby Grace Drake, Emily P. Driessen, Sheritta Fagbodun, Brian Gibbens, Jeremiah A. Henning, Sophie J. McCoy, Seth K. Thompson, Charles G. Willis & A. Kelly Lane, *“Out of My Control”: Science Undergraduates Report Mental Health Concerns and Inconsistent Conditions When Using Remote Proctoring Software*, 19 INT’L J. EDUC. INTEGRITY, Nov. 15, 2023, at 17.

48. Hengyi Fu & Yao Lyu, *Facial Recognition Interaction in a University Setting: Impression, Reaction, and Decision-Making*, 13192 LECTURE NOTES COMPUT. SCI. 329, 333–35 (2022).

students from historically marginalized groups are more likely to experience surveillance as a source of discomfort or exclusion, particularly when the technologies in question have documented patterns of racial or linguistic bias.⁴⁹

The educational consequences for students are also notable. Instructors and advisors may use predictive analytics to steer students toward courses in which they are statistically more likely to succeed. Even more extreme, if systems predict that a student is unlikely to be retained, administrators and advisors may lessen their allocation of time and resources to that student or encourage them to withdraw entirely.⁵⁰ This is not entirely unrealistic: the president of Mount St. Mary's University used predictive analytics to identify struggling first-year students and offered tuition refunds for those choosing to leave before the cutoff date for reporting the school's enrollment to the federal government so that the school's retention rate would not suffer.⁵¹ Defending the policy and use of technology, the president wrote to faculty, "This is hard for you because you think of the students as cuddly bunnies, but you can't. You just have to drown the bunnies . . . put a Glock to their heads."⁵² While such predictive practices improve retention and course completion metrics, they may also limit students' exposure to intellectually challenging or professionally relevant coursework. These systems encourage a predictable and efficient course of completion for a college degree that leaves little room for intellectual experimentation or exploration.

Digital technologies are integrated into universities based on the promise of increased administrative efficiency, which is not always aligned with improved learning outcomes or positive student experiences.⁵³ Additionally, university rankings tend to measure institutional resources and selectivity rather than learning outcomes, instruction, and affordability.⁵⁴ The data that

49. See Mona Sloane, *Surveillance Society: Artificial Lighting for a Policed Public*, ARCHITECTURAL REV. (Sep. 15, 2021), <https://www.architectural-review.com/essays/technology/surveillance-society-artificial-lighting-for-a-policed-public>; Allison Koenecke, Andrew Nam, Emily Lake, Joe Nudell, Minnie Quartey, Zion Mengesha, Connor Toups, John R. Rickford, Dan Jurafsky & Sharad Goel, *Racial Disparities in Automated Speech Recognition*, 117 PNAS 7684, 7687 (2020) (concluding that "it is considerably harder for African Americans to benefit from . . . speech recognition technology").

50. Kyle M.L. Jones & Chase McCoy, *Reconsidering Data in Learning Analytics: Opportunities for Critical Research Using a Documentation Studies Framework*, 44 LEARNING MEDIA & TECH. 52, 56 (2019).

51. *Id.*; Scott Jaschik, *Are At-Risk Students Bunnies to Be Drowned?*, INSIDE HIGHER ED (Jan. 19, 2016), <https://www.insidehighered.com/news/2016/01/20/furor-mount-st-marys-over-presidents-alleged-plan-cull-students>.

52. Jaschik, *supra* note 51.

53. Zoia Sharlovyh, Liudmyla Vilchynska, Serhiy Danylyuk, Bohdan Huba & Halyna Zadilka, *Digital Technologies as a Means of Improving the Efficiency of Higher Education*, 13 INT'L J. INFO. & EDUC. TECH. 1214, 1215–19 (2023).

54. ROBERT KELCHEN, HIGHER EDUCATION ACCOUNTABILITY (2018).

students produce as part of participating in university life is often used as business intelligence and as a means of evaluating institutional effectiveness and funding.⁵⁵

This means that students now leave behind extensive digital footprints that may influence future risk assessments, employment opportunities, visa eligibility, or insurance premiums as student data is sold by vendors to analytics firms outside of higher education, for example as training data for AI models. Many technology providers, including the LMS platform Canvas, are criticized for their vague and opaque privacy policies.⁵⁶ Though companies often assert that they do not sell student data, acquisitions and mergers complicate these assurances.⁵⁷ For example, the private equity firm Thoma Bravo acquired Instructure, the company behind Canvas, followed by another acquisition by KKR.⁵⁸ Instructure is now the subject of a class-action lawsuit alleging violations of the privacy rights of minor students, with claims that the platform monetized student data and shared it with third parties.⁵⁹

These developments point to a broader structural issue: universities have ceded substantial control over student data and digital technologies to an ecosystem of private vendors that operate with little transparency. Technology vendors disclose only minimal, opaque information as to how they use the data they collect from users.⁶⁰ Many services have further data outflow to third parties, whether through the sharing of advertising preferences or students' personally identifiable information. For example, Pearson's MyLab, a digital learning platform, transmits student names and emails to Google Analytics, along with notifications of what students read and highlight in their digital

55. Ben Williamson, *The Hidden Architecture of Higher Education: Building a Big Data Infrastructure for the 'Smarter University,'* 15 INT'L J. EDUC. TECH. HIGHER EDUC., Mar. 8, 2018, at 10.

56. See, e.g., Britt Paris, Rebecca Reynolds & Catherine McGowan, *Platforms Like Canvas Play Fast and Loose with Students' Data*, NATION (Apr. 22, 2021), <https://www.thenation.com/article/society/canvas-surveillance/>.

57. See Matthew Rozsa, *Students Fear for Their Data Privacy After University of California Invests in Private Equity Firm*, SALON (July 28, 2020), <https://www.salon.com/2020/07/28/students-fear-for-their-data-privacy-after-university-of-california-invests-in-private-equity-firm/>.

58. Press Release, Instructure, Instructure to be Acquired by KKR (July 25, 2024), <https://www.instructure.com/press-release/instructure-to-be-acquired-by-KKR>.

59. Class Action Complaint, *Hernandez-Silva v. Instructure, Inc.*, No. 25-cv-02711 (C.D. Cal. Mar. 27, 2025), ECF No. 1; see Roma Patel, *EdTech and Privacy of Student Information: A Case Study*, ROBINSON+COLE (Apr. 3, 2025), <https://www.dataprivacyandsecurityinsider.com/2025/04/edtech-and-privacy-of-student-information-a-case-study/>.

60. Michele Molnar, *Most Ed-Tech Products Don't Meet Minimum Criteria in Their Privacy Policies, Report Finds*, EDWEEK MKT. BRIEF (May 29, 2018), <https://marketbrief.edweek.org/regulation-policy/most-ed-tech-products-dont-meet-minimum-criteria-in-their-privacy-policies-report-finds/2018/05>.

textbook.⁶¹ These third-party platforms do not have agreements with the university itself and oftentimes the university is not aware of this data outflow.

As a result of the COVID-19 pandemic, universities became increasingly reliant on digital technologies in every aspect, from contact tracing to lecture delivery to remote food ordering.⁶² Commercial technology solutions were rapidly procured en masse, with a decreased opportunity to review these tools or for university stakeholders to resist their adoption.⁶³ This expansion has become normalized and entrenched as many of these digital technologies are widely used at universities today.⁶⁴ As universities outsource the provision of services to vendors, technologies introduced as supplemental tools often evolve into infrastructural necessities.

Once a tool or platform is adopted, it is rarely discontinued even if its utility remains unproven. Instead, vendors can introduce new features and integrations to expand their data collection without sufficient institutional oversight. Most universities lack the capacity to continuously monitor and assess their hundreds of procured digital technologies. When SpotterEDU was procured at Syracuse University, it contained a feature allowing students to share their exact GPS coordinates with faculty. While this feature was later removed, it was part of the original license despite its irrelevance to SpotterEDU's intended purpose of class attendance tracking.⁶⁵ The unchecked expansion of features and tools from vendors allows them to embed commercial priorities into the core of the university over other stakeholders and their concerns. Vendors have different priorities, such as mitigating technical deficits rather than addressing the broader technology concerns held

61. Taylor Swaak, *The 'Textbook' That Reads You*, CHRON. HIGHER EDUC. (July 20, 2023), <https://www.chronicle.com/article/the-textbook-that-reads-you>.

62. Kristin R.V. Harrington, Meron R. Siira, Elizabeth P. Rothschild, Sharon R. Rabinovitz, Samuel Shartar, David Clark, Alexander Isakov, Allison Chamberlain, Enku Gelaye, J. Peter Cegielski & Neel R. Gandhi, *A University-Led Contact Tracing Program Response to a COVID-19 Outbreak Among Students in Georgia, February-March 2021*, 137 PUB. HEALTH REPS. 61S (2022); Darrell J.R. Evans, *Has Pedagogy, Technology, and Covid-19 Killed the Face-to-Face Lecture?*, 15 ANATOMICAL SCIS. EDUC. 1145 (2022); Press Release, Grubhub, Grubhub and Transact Partner to Offer Universities Expanded Off-Campus Meal Spending Programs for Students (Aug. 12, 2021), <https://about.grubhub.com/news/grubhub-and-transact-partner-to-offer-universities-expanded-off-campus-meal-spending-programs-for-students/>.

63. Kyle M.L. Jones, Amy VanScoy, Alison Harding & Amy Martin, *Changing Student Privacy Responsibilities and Governance Needs: Views from Faculty, Instructional Designers, and Academic Librarians*, 37 J. COMPUTING HIGHER EDUC. 327, 340 (2025); Janja Komljenovic, *The Future of Value in Digitalised Higher Education: Why Data Privacy Should Not Be Our Biggest Concern*, 83 HIGHER EDUC. 119, 120 (2022).

64. Nurullah Aydın, Muhammed Fatih Sayır, Süleyman Aydeniz & Tacettin Şimşek, *How Did COVID-19 Change Faculty Members' Use of Technology?*, 13 SAGE OPEN, Jan. 18, 2023, at 8–9.

65. Harwell, *supra* note 27.

by faculty.⁶⁶ However, assuming, arguendo, that a university has full awareness of vendors' uses of data, existing governance structures give students and faculty little control. We discuss such governance structures in the following Part.

III. TECHNOLOGY GOVERNANCE IN UNIVERSITIES

Technology governance at universities has aligned with developments in university governance more generally. In many cases, administrators dictate most policies with minimal faculty input and rarely any student involvement.

In higher education, technology governance encompasses both IT and data concerns and focuses on the structures, processes, and policies that direct the procurement, use, and oversight of digital systems and data in support of administrative, teaching, and research activities.⁶⁷ Experts suggest that effective technology governance practices, including ensuring information security, managing digital integrations, and protecting privacy, must match the organization's strategic mission.⁶⁸ In this context, effectiveness refers to how well governance mechanisms ensure that technology is used to deliver institutional value, manage risks, and optimize resources in alignment with the university's broader mission.⁶⁹

In most universities, governance responsibilities are distributed across a hierarchy of stakeholders from board-level positions to departmental units. At the highest level, board-level IT or technology committees set the strategic direction of university technology governance. These groups play a key role in ensuring that technology mirrors the institution's objectives. Recently, university executive leadership has also expanded to include positions such as

66. See Emma Harvey, Allison Koenecke & Rene F. Kizilcec, "Don't Forget the Teachers": Towards an Educator-Centered Understanding of Harms from Large Language Models in Education, CHI '25: PROC. OF THE 2025 CHI CONF. ON HUM. FACTORS COMPUTING SYS. 1, 9 (Apr.–May 2025).

67. Michael Hicks, Graham Pervan & Brian Perrin, *A Case Study of Improving Information Technology Governance in a University Context*, 318 IFIP ADVANCES INFO. & COMM'N TECH. 89, 89–90 (2010); Alejandra Oñate-Andino, David Mauricio, Gloria Arcos-Medina & Danilo Pastor, *The Application and Use of Information Technology Governance at the University Level*, 858 ADVANCES INTELLIGENT SYS. & COMPUTING 1028, 1028–29 (2018).

68. See, e.g., Peter Weill & Jeanne W. Ross, *IT Governance on One Page* 6–7 (MIT Ctr. for Info. Sys. Rsch., Working Paper No. 349, 2004); PETER WEILL & JEANNE W. ROSS, IT GOVERNANCE: HOW TOP PERFORMERS MANAGE IT DECISION RIGHTS FOR SUPERIOR RESULTS 2–3 (2004); Deborah Louise Carraway, *Information Technology Governance Maturity and Technology Innovation in Higher Education: Factors in Effectiveness* 17 (May 1, 2015) (M.S. thesis, University of North Carolina at Greensboro), <https://libres.uncg.edu/ir/uncg/listing.aspx?id=18073>.

69. Carraway, *supra* note 68, at 29–30.

Chief Information Officer (CIO), Chief Information Security Officer (CISO), and Chief Privacy Officer (CPO).⁷⁰

Universities additionally rely on standing committees, councils, or working groups to coordinate technology governance across departments and administrative units, especially to establish data classification standards, oversee compliance with privacy and security regulations, and develop policy recommendations. Approximately 75 percent of universities have a data governance body in this form.⁷¹ Many have also established campus-wide privacy governance boards, including UCLA's Board on Privacy and Data Protection and the University of Chicago's Data Stewardship Council.⁷²

At the management and implementation levels, IT offices are central to the execution of technology governance practices. On average, IT offices are responsible for around 60 percent of technology functions and services across universities.⁷³ As institutions move toward centralized technology resource management, IT offices perform the critical functions of procuring technology, implementing cybersecurity protocols, and providing guidance to faculty, students, and administrative units.⁷⁴

Institutional research (IR) offices or attachments play a similar role in managing and operationalizing data-based resources. Typically the second- or third-largest team involved in data governance,⁷⁵ IR teams collect, analyze, and steward institutional data. Often embedded within business, planning, enrollment and admissions, or financial units,⁷⁶ institutional researchers facilitate data analytics operations, including predictive analytics and learning analytics, for other teams at universities. IR offices are frequently tasked with ensuring that data privacy and protection standards are being followed.

70. Merritt Neale & Matthew Tryniecki, *The Post-Pandemic Evolution of Student Data Privacy*, EDUCAUSE REV. 51, 55–56 (2020), https://er.educause.edu/-/media/files/articles/2020/8/er20_3104.pdf; Mike Wulff, *The Evolving Role of CIOs in Higher Education*, EDUCAUSE REV., Aug. 25, 2022, <https://er.educause.edu/articles/2022/8/the-evolving-role-of-cios-in-higher-education>; Valerie Vogt, *The Chief Privacy Officer in Higher Education*, EDUCAUSE REV., June 4, 2018, <https://er.educause.edu/articles/2018/6/its-time-to-set-cisos-free>.

71. Cary K. Jim & Hsia-Ching Chang, *The Current State of Data Governance in Higher Education*, 55 PROC. ASS'N INFO. SCI. & TECH. 198, 202 (2018).

72. Neale & Tryniecki, *supra* note 70, at 56.

73. Che-Wei Liu, Peng Huang & Henry C. Lucas Jr., *Centralized IT Decision Making and Cybersecurity Breaches: Evidence from U.S. Higher Education Institutions*, 37 J. MGMT. INFO. SYS. 758, 772 (2020).

74. *What Is the Higher Education IT Environment?*, UNIV. WASH., https://uwconnect.uw.edu/it?id=kb_article_view&sysparm_article=KB0034193 (last visited May 30, 2025).

75. Jim & Chang, *supra* note 71, at 201.

76. J. Fredericks Volkwein, *The Foundations and Evolution of Institutional Research*, 2008 NEW DIRECTIONS HIGHER EDUC. 5, 6.

Enforcement of the Family Educational Rights and Privacy Act (FERPA) often falls to IR offices.⁷⁷

Even though IR offices are supposed to enforce existing regulations like FERPA, these regulations have failed to keep pace with the development of the digital technology ecosystem in higher education. FERPA guarantees students the right to inspect their education records, amend inaccurate or misleading information, and file complaints if their rights are violated.⁷⁸ However, institutions are not equipped to track information flow to dozens or hundreds of technology vendors, much less inform students of how data about them is used, to what ends, and by whom.⁷⁹ FERPA also allows universities to disclose private identifiable information about students without their consent or knowledge to any third party that provides “institutional services or functions,” like an educational technology company.⁸⁰ As long as a “legitimate educational interest” exists, the sharing and use of student data is allowed.⁸¹ Universities have broad discretion in determining who qualifies as having a “legitimate educational interest” in student data.⁸² FERPA provides no clear standards or guidance for what constitutes such an interest, effectively allowing institutions to classify nearly any third-party vendor as eligible to receive student information.⁸³

FERPA’s original intent was to prevent inaccurate information from permanently following students.⁸⁴ It now enables the opposite: data flows out of the university to private vendors with minimal oversight or restriction. In practice, FERPA delegates most decision-making and enforcement regarding student privacy to educational institutions, which in turn defer to private vendors. In doing so, universities place student data in the hands of those with a commercial interest in sharing and selling that data.⁸⁵

77. Kyle M.L. Jones & Chase McCoy, *Privacy in Practice: A Socio-Technical Integration Research (STIR) Study of Rules-in-Use Within Institutional Research*, in GOVERNING PRIVACY IN KNOWLEDGE COMMONS 98, 107 (Madelyn Rose Sanfilippo, Brett M. Frischmann & Katherine J. Strandburg eds., 2021).

78. Family Educational Rights and Privacy Act of 1974, 20 U.S.C. § 1232g(a)(1)–(2), (f)–(g).

79. Elana Zeide, *The Limits of Education Purpose Limitations*, 71 U. MIAMI L. REV. 494, 503–09 (2017).

80. 34 C.F.R. § 99.31(a)(1)(i)(B) (2025); Jones, *supra* note 28, at 10.

81. Jones et al., *supra* note 25, at 502.

82. *Id.*

83. Michael Brown & Carrie Klein, *Whose Data? Which Rights? Whose Power? A Policy Discourse Analysis of Student Privacy Policy Documents*, 91 J. HIGHER EDUC. 1149, 1165 (2020).

84. Zeide, *supra* note 79, at 499, 501, 503, 514.

85. Elana Zeide, *Student Privacy Principles for the Age of Big Data: Moving Beyond Ferpa and Fipps*, 8 DREXEL L. REV. 339, 342, 359–62 (2016).

Moreover, formal training on legal requirements for privacy including FERPA remains inconsistent among institutional researchers. According to a survey of 232 institutional researchers, 53 percent taught themselves about FERPA, while 22.5 percent received no training.⁸⁶ Fuller also highlights a culture in institutional research that prioritizes individual practice over formal written policies, resulting in inconsistent FERPA enforcement.⁸⁷ This lack of training and documentation exposes students to greater harm in the event of a data breach or FERPA violation.

Although not always viewed as central actors in technology governance, faculty exert influence over the adoption and use of learning technologies. Requests to IT offices to procure or allow new educational tools often originate with faculty.⁸⁸ However, faculty do not consider themselves to be tasked with upholding student privacy. While many faculty believe privacy is important to intellectual freedom and the learning environment, this concern does not translate into the selection of privacy-protecting technologies. Instead, faculty tend to rely on institutional vetting offices, trusting that the tools approved by the university meet the necessary legal and ethical requirements.⁸⁹

University legal counsel also plays a pivotal yet underexamined role in technology governance. Legal offices are responsible for drafting, reviewing, and approving procurement contracts with third-party service providers, including data sharing and user agreements. They coordinate institutional efforts to ensure regulatory compliance with relevant privacy laws.⁹⁰ However, the designation of legal counsel as arbiters of technology decisions may lead to a governance framework that emphasizes compliance and liability minimization over ethical considerations such as informed consent.⁹¹

Universities are a specialized context for IT governance, which grew out of the corporate context.⁹² Existing frameworks for technology governance, such as Information Technology Infrastructure Library (ITIL)⁹³ or Control

86. Jones & McCoy, *supra* note 77, at 107.

87. Matthew Fuller, *The Practices, Policies, and Legal Boundaries Framework in Assessment and Institutional Research*, 2016 NEW DIRECTIONS FOR INSTITUTIONAL RSCH. 9, 23 (2017).

88. Swaak, *supra* note 61.

89. Kyle M.L. Jones, Amy VanScoy, Kawanna Bright, Alison Harding & Sanika Vedak, *A Measurement of Faculty Views on the Meaning and Value of Student Privacy*, 34 J. COMPUTING HIGHER EDUC. 769, 782–83 (2022).

90. David Jesse, *Your College's Top Lawyer Has Never Been More Powerful*, CHRON. HIGHER EDUC. (Feb. 26, 2024), <https://www.chronicle.com/article/your-colleges-top-lawyer-has-never-been-more-powerful>.

91. Jones et al., *supra* note 63, at 341.

92. Oñate-Andino et al., *supra* note 67, at 1029.

93. ITIL is a framework that provides standardized procedures and best practices for managing IT services, originally developed for use in commercial and government sectors.

Objectives for Information and Related Technologies (COBIT),⁹⁴ are frequently ill-suited to at least some of the needs of academic institutions.⁹⁵ Generally, literature suggests that none of the prominent technology frameworks comprehensively cover process, structure, human behavior, and organizational culture.⁹⁶ Accordingly, many universities create their own frameworks for governance, which bring other unique challenges. There is a contemporary lack of research on information technology governance in universities, which complicates efforts to create robust frameworks.⁹⁷ This dearth of research is also true for the technology governance of big data and AI in universities, which, as discussed, are increasingly ubiquitous.⁹⁸

The decentralization of many universities also poses a challenge to cohesive technology governance. CIOs and CISOs point to the culture of decentralization as one of the major barriers to information security.⁹⁹ This also helps contextualize the importance of committees, councils, and working groups within universities to bring together decision-makers across administrative units. Universities with a higher degree of centralization suffer fewer cybersecurity breaches, and this effect is strongest in public and research universities.¹⁰⁰

Many universities also suffer from insufficient training among governance stakeholders. Board members rarely come from technical backgrounds, so they lack the expertise needed to understand the implications of technology

Sarah K. White & Lynn Greiner, *What Is ITIL? Your Guide to the IT Infrastructure Library*, CIO (June 3, 2025), <https://www.cio.com/article/272361/infrastructure-it-infrastructure-library-itil-definition-and-solutions.html>.

94. COBIT is an IT management framework created by the Information Systems Audit and Control Association to help organizations design, implement, and govern enterprise IT strategies effectively. Sarah K. White, *What Is Cobit? A Framework for Alignment and Governance*, CIO (June 12, 2023), <https://www.cio.com/article/228151/what-is-cobit-a-framework-for-alignment-and-governance.html>.

95. Elinda Kajo Meçe, Enida Sheme, Evis Trandafili, Carlos Juiz, Beatriz Gómez & Ricardo Colomo-Palacios, *Governing IT in HEIs: Systematic Mapping Review*, 11 BUS. SYS. RSCH. J. 93, 103 (2020).

96. See, e.g., Daniël Smits & Jos van Hillegersberg, *The Continuing Mismatch Between IT Governance Theory and Practice: Results from a Systematic Literature Review and a Delphi Study with CIOs*, 24 J. MGMT SYS. 1 (2014).

97. Hicks et al., *supra* note 67, at 92.

98. Amrita Priyadarsini & Ajit Kumar, *A Literature Review on IT Governance Using Systematicity and Transparency Framework*, 24 DIGIT. POL'Y REGUL. & GOVERNANCE 309, 320 (2022).

99. See Matt Behrens, *How Iowa Centralized IT and Massively Overhauled State Systems*, GOV'T TECH. (May 7, 2025), [///how-iowa-centralized-it-and-massively-overhauled-state-systems](https://www.gov'tech.com/news/how-iowa-centralized-it-and-massively-overhauled-state-systems); Liu et al., *supra* note 73, at 759.

100. Liu et al., *supra* note 73, at 780–81.

policies.¹⁰¹ This lack of awareness can introduce barriers between strategic direction and implementation, which increases reliance on technology professionals for operational decisions that might otherwise be addressed at the governance level. This view is also held by campus stakeholders: faculty and librarians cite IT staff as having the most responsibility for assessing student technology needs and privacy concerns because they make decisions about technology procurement and support and also have the most technical knowledge about digital systems that involve student data.¹⁰²

Despite serving important functions, chiefly ensuring maintenance of systems and cybersecurity, IT governance in higher education is characterized by a very limited engagement with students. Often, this practice is carried out by the broadly shared assumption that students do not care about their privacy. Outdated literature suggests that young people as “digital natives” that trade personal data for convenience and access.¹⁰³ However, more recent studies discredit this assumption, demonstrating that students are concerned about the widening scope and granularity of data collection, as well as what that data is used for by universities without their knowledge or consent.¹⁰⁴

For students, technology governance remains a particularly opaque and exclusionary part of the university power structure. A 2024 EDUCAUSE survey found that 39 percent of higher education institutions reported no student involvement in technology governance processes, and an additional 35 percent characterized student participation as “ad hoc.”¹⁰⁵ Just 6 percent of

101. See Ofir Turel, Peng Liu & Chris Bart, *Board-Level IT Governance*, 21 IT PRO. 58, 61 (2019).

102. Jones et al., *supra* note 63, at 336–37.

103. See, e.g., Alessandro Acquisti & Ralph Gross, *Imagined Communities: Awareness, Information Sharing, and Privacy on the Facebook*, 4258 LECTURE NOTES COMPUT. SCI. 36, 37, 53–54 (2006); Susan B. Barnes, *A Privacy Paradox: Social Networking in the United States*, 11 FIRST MONDAY (Sep. 4, 2006), <https://doi.org/10.5210/fm.v11i9.1394>; Danah Boyd & Eszter Hargittai, *Facebook Privacy Settings: Who Cares?*, 15 FIRST MONDAY (July 27, 2010), <https://doi.org/10.5210/fm.v15i8.3086>.

104. See, e.g., Lynne D. Roberts, Joel A. Howell, Kristen Seaman & David C. Gibson, *Student Attitudes Toward Learning Analytics in Higher Education: “The Fitbit Version of the Learning World”*, 7 FRONTIERS PSYCH., Dec. 19, 2016, at 5–8; JOSIE FISHER, FREDY-ROBERTO VALENZUELA & SUE WHALE, *LEARNING ANALYTICS: A BOTTOM-UP APPROACH TO ENHANCING AND EVALUATING STUDENTS’ ONLINE LEARNING* (2014), https://ltr.edu.au/resources/SD12_2567_Fisher_Report_2014.pdf; Dirk Ifenthaler & Clara Schumacher, *Student Perceptions of Privacy Principles for Learning Analytics*, 64 EDUC. TECH. RSCH. & DEV. 923, 933–34 (2016); Park & Vance, *supra* note 23.

105. Ashley Caron, *QuickPoll Results: Positioning Higher Education IT Governance as a Strategic Function*, EDUCAUSE REV. (Feb. 21, 2024), <https://er.educause.edu/articles/2024/2/educause-quickpoll-results-positioning-higher-education-it-governance-as-a-strategic-function>.

universities reported that students serve as decision-makers.¹⁰⁶ This exclusion persists even as digital technologies become more central to students' academic and personal lives. The governance processes surrounding these systems are nontransparent to students, although they are most directly affected by data collection and digital transformations on campuses.¹⁰⁷

Despite their limited power to shape these processes, students express clear desires for meaningful technology innovation, use, and governance. Students overwhelmingly believe that data collected about them should be de-identified and discarded once students exit the institution.¹⁰⁸ They expect universities to differentiate between the personal and academic spheres in data collection and use and strongly oppose the collection of biometric information.¹⁰⁹ Further, students perceive the sale of their data to any third parties as a violation of the trust they have in their universities.¹¹⁰ Students clearly emphasize their ownership of their own data and their ability to regulate its collection, which are not recognized in turn by their universities.

Students also expect their data to be collected with an explicit plan for its use that improves the student experience. When institutions use student data for analytics, students expect such features to support their academic plans, organize their learning process, provide self-assessments, offer personalized recommendations, and create analyses of their learning.¹¹¹ These preferences are not inherently misaligned with university goals; on the contrary, they could help institutions design more effective, student-centered technologies. However, universities and vendors rarely engage students as co-creators and learning experts during the development or deployment of these systems, missing the opportunity to align data practices with the priorities of those most affected.

Given students' trust in universities to steward their data, and the growth of technology in universities as a powerful and largely unaccountable system of control, questions of student agency in technology and data governance become more important and urgent. How have we come to accept student exclusion from the governing processes that deeply impact their learning, privacy, and well-being? In the next Part, we explore more generally the historical and deeply entrenched exclusion of students from American

106. *Id.*

107. Madelyn Rose Sanfilippo, Noah Apthorpe, Karoline Brehm & Yan Shvartzshnaider, *Privacy Governance Not Included: Analysis of Third Parties in Learning Management Systems*, 124 INFO. & LEARNING SCIS. 326, 342 (2023).

108. Jones et al., *supra* note 25, at 499.

109. Park & Vance, *supra* note 23.

110. Jones et al., *supra* note 25, at 501, 503–04.

111. Clara Schumacher & Dirk Ifenthaler, *Features Students Really Expect from Learning Analytics*, 78 COMPUTS. HUM. BEHAV. 397, 404–05 (2018).

university governance, before offering an alternative governing and legal framework designed to address these exclusions.

IV. THE MARGINALIZATION OF STUDENTS FROM UNIVERSITY GOVERNANCE

Universities have become more technology-oriented and data-driven, at a time when students are increasingly marginalized or excluded from university governance. One scholar describes university governance as antidemocratic: “The power of rule is concentrated in a body whose members are neither selected by nor formally accountable to those over whom they rule.”¹¹² Those with the power to rule describe their arrangement as one of shared governance, but such sharing usually only extends to administrators and faculty as students are given token representation at best in the boards and committees that govern these institutions.¹¹³

Even though students today do not hold meaningful governance roles, they historically were able to exercise power in universities. Early models of the university emphasized shared governance between students and faculty. Though this ideal eroded in the United States under the doctrine of *in loco parentis* (“in the place of parents”), it was partially revived during the wave of student protests in the 1960s and 1970s, when students won greater recognition and some formal roles in university decision-making. In recent decades, however, student influence has declined sharply, coinciding with the rise of managerialism and the rapid expansion of surveillance and data technologies on campus. The following Section traces this shifting relationship between students and institutional governance.

In medieval Europe, students shared governance power with faculty, municipal, and religious authorities at some early universities. The most notable example of student control emerged at the University of Bologna in the thirteenth century.¹¹⁴ There, foreign students lacking the same legal protections as citizens organized themselves into protective guilds known as nations. As the city government’s influence over the university increased,

112. TIMOTHY V. KAUFMAN-OSBORN, *THE AUTOCRATIC ACADEMY: REENVISIONING RULE WITHIN AMERICA’S UNIVERSITIES* 14–15 (2023).

113. See, e.g., Josephine A. Boland, *Student Participation in Shared Governance: A Means of Advancing Democratic Values?*, 11 TERTIARY EDUC. & MGMT. 199, 200 (2005) (“While governance within higher education attracts increasing critical attention, participation of students has not featured prominently in these discussions.”).

114. See SVEN STELLING-MICHAUD, *L’UNIVERSITÉ DE BOLOGNE ET LA PÉNÉTRATION DES DROITS ROMAINS ET CANONIQUES EN SUISSE AU XIII^E ET XIV^E SIÈCLES* [THE UNIVERSITY OF BOLOGNA AND THE INFLUENCE OF ROMAN AND CANON LAW INTO SWITZERLAND IN THE 13TH AND 14TH CENTURIES] 26 (1955), cited in 1 A HISTORY OF THE UNIVERSITY IN EUROPE 213, 260 (H. De Ridder-Symoens & Walter Rugg eds., 1988).

students consolidated these guilds into a student union with elected rectors, independent legal status, and its own statutes.¹¹⁵ A council of student rectors and elected representatives from the nations served as the university's central governance structure.¹¹⁶ This body exercised significant control over the faculty: electing teaching doctors annually, controlling their salary, and fining them for infractions, including deviation from student-approved curricula and poor lecture quality.¹¹⁷ Students' control over faculty pay and their capacity for collective violence, such as arson, riots or building takeovers,¹¹⁸ enabled them to enforce compliance with this structure despite opposition from faculty and city officials.¹¹⁹ Although this extreme form of student power was later curtailed by the advent of salaried professorships funded by civic authorities, the model of governance at the University of Bologna marks a possible high point of student institutional control.¹²⁰

The model of governance pioneered at Bologna served as a prototype for other Southern European universities. Within Italy, the University of Padua replicated the same model of complete student control.¹²¹ Even though student power at this level was controversial in Italian society, there was broad acceptance of the principle that students should wield some degree of authority within the university.¹²² Variants of student governance appeared at other Italian universities, including Perugia, Pisa, Florence, Pavia, Ferrara, Vicenza, Vercelli, and Piacenza, where students shared power with faculty and civic authorities.¹²³

At French provincial universities around the same time, student power grew in tandem with opposition to ecclesiastical control over universities. French provincial universities fused elements of the Bolognese model with the hierarchical structure of the University of Paris, where students had virtually

115. See GUIDO ROSSI, "UNIVERSITAS SCHOLARIUM" E COMUNE (SEC. XII–XIV) ["UNIVERSITY SCHOLARSHIP" COMMUNE (12TH–14TH CENTURIES)] 175 (1955), cited in 1 A HISTORY OF THE UNIVERSITY IN EUROPE 85 (H. De Ridder-Symoens & Walter Rugg eds., 1988).

116. STELLING-MICHAUD, *supra* note 114, at 123–24.

117. See Gaines Post, Masters' Salaries and Student-Fees in the Mediaeval Universities, 7 SPECULUM 181, 191–92 (1932).

118. Jonathan Davies, *Violence and Italian Universities During the Renaissance*, 27 RENAISSANCE STUD. 504, 508–09 (2013).

119. PEARL KIBRE, THE NATIONS IN THE MEDIAEVAL UNIVERSITIES 123–29 (1948).

120. Alan B. Cobban, *Medieval Student Power*, 53 PAST & PRESENT 28, 43–44, 65 (1971).

121. HASTINGS RASHDALL, THE UNIVERSITIES OF EUROPE IN THE MIDDLE AGES 9 (2010).

122. KIBRE, *supra* note 119, at 123–29.

123. RASHDALL, *supra* note 121, at 1–62.

no formal authority.¹²⁴ While the University of Paris remained controlled by faculty, student revolts across the provinces led to negotiated governance contracts that balanced the claims of faculty and students in university governance.¹²⁵ Student nations emerged at several universities, including Montpellier.¹²⁶ While students and faculty agreed that universities should be independent, faculty ultimately aligned themselves with ecclesiastical authorities rather than share institutional power. Despite this, student participation in governance persisted into the fifteenth century at universities in Aix, Poitiers, Valence, Nants, and Bourges while religious influence substantially receded.¹²⁷

In Spain, some universities also emulated the University of Bologna's model. At the University of Salamanca, students formed their own council of elected rectors and formed nations.¹²⁸ At Valladolid, students occupied half of the seats on the university's governing council and held authority over the election of faculty to the other seats.¹²⁹ Other Spanish universities, including those at Lerida, Perpignan, and Huesca, incorporated similar elements of student governance to varying degrees.¹³⁰

Ultimately, the model of the "masters' university" originating in Paris came to dominate the European university landscape. This model was premised on the idea that faculty held jurisdiction over academic matters, student discipline, and institutional governance.¹³¹ It was adopted at English universities, including Oxford and Cambridge, as well as Northern European universities broadly.¹³² Even in Italy and France, where some universities followed an alternative model, many institutions trended towards professionalized faculty governance and eroded student power by the end of the fifteenth century.¹³³

The first American colleges modeled themselves after English universities. Colleges such as Harvard, Yale, and the College of William & Mary, founded in the years when large parts of America were a British colony, largely embraced the same governance structure, placing authority in the hands of

124. See V.R. Cardozier, *Student Power in Medieval Universities*, 46 PERS. & GUIDANCE J. 944, 944–45 (1968).

125. MARCEL FOURIER, *LES STATUTS ET PRIVILÈGES DES UNIVERSITÉS FRANÇAISES DEPUIS LEUR FONDATION JUSQU'EN 1789* [THE STATUTES AND PRIVILEGES OF FRENCH UNIVERSITIES FROM THEIR FOUNDATION IN 1789] 189 (1890).

126. WALTER RUEGG, *A HISTORY OF THE UNIVERSITY IN EUROPE* 13 (Hilde De Ridder-Symoens ed., 1992).

127. RASHDALL, *supra* note 121, at 186.

128. KIBRE, *supra* note 119, at 156–57.

129. RASHDALL, *supra* note 121, at 69.

130. Cobban, *supra* note 120, at 56.

131. *Id.*

132. Cardozier, *supra* note 124, at 945, 947–48.

133. Cobban, *supra* note 120, at 65.

faculty and appointed boards.¹³⁴ However, the political break of the United States with England and its embrace of democratic ideals led to innovations in student governance.

The origins of formal student governance in the United States are somewhat contested. Some accounts trace the first student government to the College of William & Mary, which adopted a student-led honor code in 1736.¹³⁵ Others point to the University of Virginia, chartered in 1816 and founded by Thomas Jefferson. Jefferson, who had studied at William & Mary, designed the University of Virginia to include a student-led honor system and governance structure with an elective curriculum.¹³⁶

The eighteenth and nineteenth centuries also saw the rise of a contrasting paternalistic approach to university administration, *in loco parentis*. The approach's origin is associated with William Blackstone's eighteenth-century *Commentaries on the Laws of England*.¹³⁷ The range of subjects covered by Blackstone's *Commentaries* is remarkable and its influence on the development of American law even more so. One chapter that continues to serve as a guiding hand in Americans' understanding of law and institutions focuses on the parent-child relationship. As a starting point, Blackstone explains: "The duty of parents to provide for the maintenance of their children, is a principle of natural law."¹³⁸ Even as some might disagree with its source in the natural law, Blackstone's account of the parental duty is rather uncontroversial. What followed were deeply contested claims, including that children are denied any other rights than those "given them by favour of their parents, or the positive constitutions of the municipal law" and that children "owe subjection and obedience [to their parents] during [their] minority, and honor and reverence ever after."¹³⁹

134. See FREDERICK RUDOLPH, *THE AMERICAN COLLEGE AND UNIVERSITY: A HISTORY* 3, 13–16 (1990).

135. *Student Accountability and Restorative Practices: Honor Code & Honor Councils*, WM. & MARY, <https://www.wm.edu/offices/communityvalues/sarp/honorcodeandcouncils/> (last visited Sep. 5, 2025); see HARRY C. MCKOWN, *THE STUDENT COUNCIL* 11 (1944); Walter P. May, *The History of Student Governance in Higher Education*, 28 *COLL. STUDENT AFFS. J.* 207, 210 (2010).

136. Others point to the University of Virginia, chartered in 1816 and founded by Thomas Jefferson. Jefferson, who had studied at William & Mary, designed the University of Virginia to include a student honor pledge and elective curriculum. MERRILL D. PETERSON, *THOMAS JEFFERSON AND THE NEW NATION: A BIOGRAPHY* 919 (1975); Coy Barefoot, *The Evolution of Honor: Enduring Principle, Changing Times*, VA. MAG. (Feb. 18, 2008), https://uvamagazine.org/articles/the_evolution_of_honor#1825.

137. See generally WILLIAM BLACKSTONE & THOMAS M. COOLEY, *COMMENTARIES ON THE LAWS OF ENGLAND* (Chicago, Callaghan & Cockcroft 1871).

138. *Id.* at 446.

139. *Id.* at 446, 453.

Centrally relevant to the student-university relationship is Blackstone's assertion that "[the father] may also delegate part of his parental authority, during his life, to the tutor or schoolmaster of his child; who is then *in loco parentis*."¹⁴⁰ Included in that delegation is the power "of restraint and correction, as may be necessary to answer the purposes for which he is employed."¹⁴¹ Aside from the outdated notion of patriarchy that permeates the writing, Blackstone's *Commentaries* raise questions about the appropriateness and extent of this delegated authority to schools and agency denial to parental offsprings. Does the school's power include the power to make and apply whatever rules it deems proper? Should students have any role in the making of the rules? Do students have the obligation to obey arbitrary rules and applications? Can students be punished or expelled for alleged rules violations without process? What duty of maintenance and care does a school owe to the student?

Although Blackstone's focus was on the relationship between primary schools and children, these questions became central to litigation disputes between universities and students as universities sought to assert paternalistic authority over the students they enrolled. In the nineteenth and early twentieth centuries, American courts answered these questions in ways that reaffirmed colleges' and universities' parental dominion over students applying the doctrine of *in loco parentis*. In 1913, the Kentucky Supreme Court wholly embraced Blackstone's *in loco parentis* view of the student-university relationship in a decision that both exemplified the prevailing legal sentiment and subsequently influenced other courts and legal institutions. The case of *Gott v. Berea College* centered around a dispute involving the private college's application of a student manual rule that forbade students from "entering any 'place of ill repute, liquor saloons, gambling houses,' etc."¹⁴² Students played no role in the rulemaking process. Nonetheless, for the court, that exclusion had no relevance for the student's obligation to obey the rule. What did have relevance was the parents' decision to affiliate their child with the college and the college's decision to admit the child. From those decisions arose the student obligation to "abide by and conform to the rules and regulations provided by the governing authorities of the college for the conduct of the students . . . upon pain of dismissal."¹⁴³ The court's reasoning about the student-college relationship followed from its understanding of the college's standing as "in loco parentis concerning the physical and moral welfare and

140. *Id.* at 453.

141. *Id.*

142. 161 S.W. 204, 205 (Ky. Ct. App. 1913).

143. *Id.* at 206.

mental training of the pupils.”¹⁴⁴ That recognition of a quasi-parental status gave Berea College the authority to “make any rule or regulation for the government or betterment of their pupils that a parent could for the same purpose.”¹⁴⁵ If the student thinks that the rules and their application are unwise or unjust, it is for the parents, not the courts, to intervene. In the absence of such parental intervention, the court explained that the school, “like a father may direct his children, [may] . . . direct their students what to eat and where they may get it, where they may go, and what forms of amusement are forbidden.”¹⁴⁶

In the decades that followed, the doctrine of *in loco parentis* shielded universities and colleges from judicial review of their rules and enforcement actions against students.¹⁴⁷ Exempt from external legal scrutiny, many of these rules became quite intrusive, restricting student autonomy and denying students the opportunity to exercise constitutionally recognized rights. As one scholar recounts, students were dismissed for smoking, “display[ing] behaviors ‘unbecoming a typical Syracuse girl,’ . . . skipping chapel, for consciously objecting to military drill, for writing private letters critical of the administration, and for marrying in a civil rather than a religious ceremony.”¹⁴⁸ Students ordinarily had no say in the adoption of the rule to which they were subjected and were often denied due process in the colleges’ enforcement of the rules. Instead, as another scholar explains:

The validity of a college rule restricting the way in which students might spend their time or money, places they might go, people with whom they might associate, where they might live, etc., came to be tested by analogy; could a parent have maintained a similar rule in the supervision of his offspring at home?¹⁴⁹

Student governance regained momentum as the Great Depression and international tensions sparked increased political engagement.¹⁵⁰ After World War II, returning veterans, empowered by the G.I. Bill, demanded greater

144. *Id.*

145. *Id.*

146. *Id.* at 207.

147. See, e.g., Brian Jackson, *The Lingering Legacy of “In Loco Parentis”: An Historical Survey and Proposal for Reform*, 44 VAND. L. REV. 1135, 1147 (1991) (“The use of *in loco parentis* amounted to blanket judicial approval for all disciplinary actions against students.”).

148. Christopher P. Loss, *Institutionalizing In Loco Parentis after Gott v. Berea College (1913)*, 116 TCHRS. COLL. REC. 1, 5 (2014).

149. William W. Van Alstyne, *The Tentative Emergence of Student Power in the United States*, 17 AM. J. COMPAR. L. 403, 406 (1969).

150. See Philip G. Altbach, *Student Politics: Activism and Culture*, in 18 INTERNATIONAL HANDBOOK OF HIGHER EDUCATION 329, 337 (James J.F. Forest & Philip G. Altbach eds., 2007).

student services and increased student participation in university governance.¹⁵¹ By the end of the 1950s, student opposition to *in loco parentis* doctrine was growing as cultural norms shifted.¹⁵² These developments paved the way for the sustained student movements of the 1960s.

Student opposition morphed into legal challenges of the status quo, including those rules and regulations adopted and enforced by colleges and universities. In 1961, approximately thirty African Americans at the Alabama State College for Negroes entered a restaurant, sat at the whites-only lunch counter, and requested service. The restaurant refused, closed the lunchroom, and called the police, who ordered the students to leave. The college's president then expelled the students for violating the college's rule of conduct without any notice or hearing, and the students later challenged their expulsion in federal court.¹⁵³ The trial court in *Dixon v. Alabama State Board of Education* upheld the expulsion pursuant to *in loco parentis*, but the appellate court reversed. The Fifth Circuit Court of Appeals held that “[w]henver a governmental body acts so as to injure an individual, the Constitution requires that the act be consonant with due process of law.”¹⁵⁴

After *Dixon*, courts imposed constitutional limits on college and university enforcement rules with the shifting judicial understanding of the status of students playing a critically important role. Courts prohibited colleges from enforcing rules in a manner that violated students' due process, free speech, and freedom of assembly rights, among others.¹⁵⁵ Concurrent with this recognition of student rights against colleges' rule enforcement actions came an evolution in the student-university relationship. Rather than parent-child, the students and universities came to be understood as contracting parties.¹⁵⁶ The evolving understanding of the relationship corresponded with a changing legal conception of college-aged students. The twenty-sixth amendment to the U.S. Constitution ratified in 1971 lowered the voting age from twenty-one to eighteen, signaling a shift in the status of most college-aged students from child to adult.¹⁵⁷ According to Blackstone, the original proponent of *in loco parentis*,

151. See PHILIP G. ALTBACH, *STUDENT POLITICS IN AMERICA: A HISTORICAL ANALYSIS* 122 (1997).

152. See Helen Lefkowitz Horowitz, *The 1960s and the Transformation of Campus Cultures*, 26 *HIST. EDUC. Q.* 1, 25–27 (1986).

153. See *Dixon v. Ala. State Bd. of Educ.*, 294 F.2d 150, 152 (5th Cir. 1961) (describing the background facts of the case).

154. *Id.* at 155.

155. Jackson, *supra* note 147, at 1150–51.

156. See WILLIAM A. KAPLIN, BARBARA A. LEE, NEAL H. HUTCHENS & JACOB H. ROOKSBY, *THE LAW OF HIGHER EDUCATION* 363–64 (6th ed. 2020) (explaining that after *Dixon*, “courts increasingly viewed students as contracting parties having rights under express and implied contractual relationships with their institutions”).

157. U.S. CONST. amend. XXVI.

that change was significant. As he explained, “[t]he legal power of a father [and his delegate] . . . over the persons of his children ceases” at the point at which the law establishes as the age of majority.¹⁵⁸

During the following decade, students mobilized in unprecedented numbers to challenge their institutions and the broader political establishment. The Civil Rights Movement, the Free Speech Movement at Berkeley, and protests against the Vietnam War—coupled with universities’ repressive responses—sparked student desire for an established voice in institutional decision-making. Students demanded participation in hiring and curriculum design, board and disciplinary body representation, control over student fees, and greater independence for student governments.¹⁵⁹ They envisioned seats on governing boards as a solution to their status as outsiders to decision-making at their institutions.¹⁶⁰

The 1970s marked the culmination of student activism in the preceding decade as students gained institutional roles and voting rights.¹⁶¹ Within universities, students successfully secured seats on their boards of trustees.¹⁶² The number of student board seats would continue to increase thereafter for decades.¹⁶³ The lowering of the voting age to eighteen in the federal constitution allowed students to participate directly in state elections. With newfound electoral power, students helped to legally enshrine student governance expansions, such as student board positions, at public universities.¹⁶⁴ During this period, activists increasingly emphasized electoral organizing alongside campus governance. However, as the Vietnam War ended, student engagement in campus activism waned.¹⁶⁵ Many students moved their political involvement off-campus, leading to a gradual decline in

158. BLACKSTONE & COOLEY, *supra* note 137, at 453.

159. Angus Johnston, *Student Protests, Then and Now: From ‘Hey, Hey, LBJ!’ to ‘Black Lives Matter!’*, CHRON. HIGHER EDUC. (Dec. 11, 2015), <https://www.chronicle.com/article/student-protests-then-and-now/>.

160. See CHRISTOPHER P. LOSS, BETWEEN CITIZENS AND THE STATE: THE POLITICS OF AMERICAN HIGHER EDUCATION IN THE 20TH CENTURY 165–214 (2014); Philip G. Altbach, *Perspectives on Student Political Activism*, 25 COMPARATIVE EDUC. 97, 100–02 (1989); Jon Lozano, *Bridging the Divide: Exploring the Connections Between Student Governments and Higher Education Governing Boards*, 45 STUD. HIGHER EDUC. 1878, 1879 (2020).

161. Altbach, *supra* note 150, at 337.

162. Lozano, *supra* note 160, at 1879; see Ray Allen Muston, *Policy Boards and Student Participation* 39 (1970) (Ph.D. Dissertation, Indiana University) (ProQuest).

163. *Student Trustees*, ASS’N OF GOVERNING BDS., <http://agb.org/briefs/student-trustees> [<https://web.archive.org/web/20160416031054/https://www.agb.org/briefs/student-trustees>]; Lozano, *supra* note 160, at 1879.

164. Lozano, *supra* note 160, at 1878–79; see Johnston, *supra* note 159.

165. Johnston, *supra* note 159.

student participation despite the achievement of structural gains in student governance.¹⁶⁶

Following this development, students began to redefine their relationship with universities through a consumerist lens, shifting the student-university relationship to contracting parties: students now were not just participants in a scholarly endeavor, but also buyers of an educational product.¹⁶⁷ Rising costs, institutional competition, economic uncertainty, and student loan debt reinforced the idea that universities were offering a service and students were their paying customers.¹⁶⁸

Though the terms of the student-university relationship had evolved, the nature of the relationship remained hierarchical, exclusionary, and undemocratic. Nominally described as an agreement between the student and the university, the “contract” operated more as one of adhesion than a mutual meeting of the mind.¹⁶⁹ Universities continued to establish the rules with minimal student input and the students consented to them as a condition to enrolling. Thus, when it came to the making of the rules in colleges and universities, the spirit of *in loco parentis* lived on.

The persistent attachment of *in loco parentis* to university governance was far from a foregone conclusion in the 1960s era of student activism. In fact, student challenges to exclusion from governance advanced in parallel to their efforts to secure protections for their constitutional rights from colleges and universities’ rules enforcement. Faculty who had separately participated in a long-term struggle with university administrators and states to secure a role for themselves in university governance initially advocated for student participation in governance, especially in the 1960s.

For example, in 1967, the American Association of University Professors issued a joint statement advocating for a more inclusive university governance process. The purpose of the university, the statement began, was to transmit knowledge, pursue truth, develop students, and promote the general well-

166. See Altbach, *supra* note 150, at 337.

167. Anthony D. Plunkett, *A's for Everyone: The Effect of Student Consumerism in the Post-Secondary Classroom*, 19 QUALITATIVE REP. 1 (2014); Joan S. Stark, *The Many Faces of Consumerism*, 1976 NEW DIRECTIONS FOR HIGHER EDUC. 89, 91–92.

168. See CAITLIN ZALOOM, INDEBTED: HOW FAMILIES MAKE COLLEGE WORK AT ANY COST 16–19 (2019); Elizabeth Popp Berman & Abby Stivers, *Student Loans as a Pressure on U.S. Higher Education*, 46 RSCH. SOCIO. ORGS. 129, 144–46, 151 (2016); Michael Mulnix, *College Students as Consumers: A Brief History of Educational Marketing*, 2 J. MKTG HIGHER EDUC. 123, 137–38 (1990).

169. See Van Alstyne, *supra* note 149, at 411 (explaining that the terms of the student-college contracts “were nonnegotiable, many were vague phrased, and unilateral authority respecting their revisions, interpretation, and administration was reserved to the college”).

being of society.¹⁷⁰ “[A]ll members of the academic community” share in this responsibility of establishing the conditions necessary to advance these purposes.¹⁷¹ It is therefore a duty of “each college and university . . . to develop policies and procedures which provide and safeguard this freedom.”¹⁷² The making of such policies and procedures, the statement continues, should involve “the broadest possible participation of the members of the academic community.”¹⁷³ That includes administrators, faculty, and students. As part of their governance role, students should not only be free “to express their views on issues of institutional policy and on matters of general interest to the student body.”¹⁷⁴ They should also “have clearly defined means to participate in the formulation and application of institutional policy affecting academic and student affairs.”¹⁷⁵

In a subsequent statement that same year from the American Association of University Professors on Government of Colleges and Universities, the professors acknowledged that “students do not . . . have a significant voice in the government of colleges and universities.”¹⁷⁶ But it called for institutes of higher education to involve those students who “desire to participate responsibly in the government of the institutions they attend . . . in the affairs of their college or university.”¹⁷⁷

The faculty’s advocacy for students’ participation in governance was, however, expressed more in words than in sustained actions as faculty remained divided on the subject. As a contemporaneous scholar explained, many faculty members “resent new demands for power sharing by students whose transient status, marginal educational expertise, and shorter perspectives appear to provide them with less than wholly attractive qualifications for the job.”¹⁷⁸ Those understanding of student limitations are also noted in the current AAUP’s statement on Government of Colleges and Universities that describes the obstacles to student participation in governance as “large and should not be minimized.”¹⁷⁹ It calls for respecting opportunities for students:

170. Am. Ass’n of Univ. Professors, *Joint Statement on Rights and Freedoms of Students*, 54 AAUP BULL. 258 (1968).

171. *Id.*

172. *Id.*

173. *Id.* at 258–59.

174. *Id.* at 260.

175. *Id.*

176. Am. Ass’n of Univ. Professors, *Statement on Government of Colleges and Universities*, 52 AAUP BULL. 375, 375 (1966).

177. *Id.* at 379.

178. Van Alstyne, *supra* note 149, at 405.

179. Am. Ass’n of Univ. Professors, *supra* note 176, at 379.

(1) to be listened to in the classroom without fear of institutional reprisal for the substance of their views, (2) freedom to discuss questions of institutional policy and operation, (3) the right to academic due process when charged with serious violations of institutional regulations, and (4) the same right to hear speakers of their own choice as is enjoyed by other components of the institution.¹⁸⁰

Notably missing from the AAUP-endorsed governance allowances is the power of students to participate in the actual making of rules. Students have not been entirely excluded from these more substantive governing processes, but their role is very limited. Acknowledging the many variations, one scholar offers a general framework for how governance works at the university level. At the top of the pyramid is a governing board who has the “fiduciary duty . . . to advance the mission of the college or university over which it presides.”¹⁸¹ The board selects a president “to whom significant powers are delegated.”¹⁸² The president then hires officers and other administrators to carry out its delegated powers. Operating below this administrative level are the faculty of the various departments, who set policy regarding faculty hiring, the academic program, and curriculum. This structure of “shared governance” includes only a small number of entry points for student participation, such as participation in discussions on faculty hires.¹⁸³

Today, many Boards of Regents or Governors for public colleges and universities do have a state legal mandate to involve students. In fact, our research shows that the laws in forty-two of the fifty states grant some participatory role to students on these bodies.¹⁸⁴ In those states, however, students have either minimal representation, no voting power, or both. The California State University and the National Association of System Heads conducted a survey of twenty-five state system governing boards and found that students had voting power on eleven of the boards, representation but no voting power on ten of the boards, and no representation at all on four of the boards.¹⁸⁵ On boards in which students had voting power, there was usually

180. *Id.*

181. KAUFMAN-OSBORN, *supra* note 112, at 12.

182. *Id.*

183. *Id.* at 12–13.

184. We examined publicly available websites describing the operation of state university boards in all 50 states to identify provisions for student participation on state university higher education boards. From this research, we found that 42 states provide for some student role in their state university higher education boards (on file with authors).

185. CAL. STATE UNIV. & NAT’L ASS’N OF SYS. HEADS, CHARACTERISTICS OF PUBLIC SYSTEM BOARDS IN US POSTSECONDARY EDUCATION (Nov. 2022).

only one student representative.¹⁸⁶ Students, therefore, have little or no input on the selection of the president or the administrators he appoints. Faculty in the departments that set faculty hiring, academic, and curricular policies usually do so through a committee structure in which students are either excluded or only given nominal representation with little to no power to influence decisions. Structurally, students serve as focus groups or consultants, rather than decision-makers. In a real sense, shared governance is really governance shared between administrators and faculty only.

When considering governance surrounding technology, there is a certain irony associated with student exclusion from university decision-making bodies. Studies consistently show that young people are the earlier adopters of technology and the more frequent users of the tools.¹⁸⁷ This is a trend that has continued with the emergence of AI.¹⁸⁸ For example, students use chatbots to help them understand complex concepts, fix grammar and language in essays, or study for quizzes. Further, students are much more likely than faculty and administrators to use and be subject to technology as part of participating in university life, including as part of their learning experience.¹⁸⁹ Good governance and rulemaking are typically associated with evidence-based information about the thing or activity being regulated. That makes students particularly well-positioned to actively participate in technology governance and help shape decisions about technology policy in college and university settings. In the next Part, our focus is on the problems associated with student exclusion from technology governance. We then draw from theory and practice to make the case for greater democratization in university technology governance.

186. *Id.* at 6 tbl.A1 (showing that students had more than one representative on only four of the eleven boards in which they had voting power).

187. *See, e.g.*, Michelle Faverio, *Share of Those 65 and Older Who are Tech Users Has Grown in the Past Decade*, PEW RSCH. CTR. (Jan. 13, 2022), <https://www.pewresearch.org/short-reads/2022/01/13/share-of-those-65-and-older-who-are-tech-users-has-grown-in-the-past-decade/> (“Younger adults are often more likely than their elders to be earlier adopters of innovations.”).

188. *See, e.g.*, Courtney Gregoire, *Increased Uptake of Generative AI Technology Brings Excitement and Highlights the Importance of Family Conversations About Online Safety, Says New Research from Microsoft*, MICROSOFT ON THE ISSUES (Feb. 5, 2024), <https://blogs.microsoft.com/on-the-issues/2024/02/05/generative-ai-online-safety-day-global-survey/> (finding young adults to be “the most active users and experimenters” with AI).

189. *See, e.g.*, Lasha Labadze, Maya Grigolia & Lela Machaidze, *Role of AI Chatbots in Education: Systematic Literature Review*, 20 INT’L J. EDUC. TECH. HIGHER EDUC., Oct. 31, 2023, at 10.

V. REMEDYING THE PROBLEM OF STUDENT EXCLUSION FROM UNIVERSITY TECHNOLOGY GOVERNANCE

Students' desires for technology use are increasingly at odds with the prevailing institutional goals. Students overwhelmingly express a preference for systems that support their life on campus and learning experience, protect their privacy, and discard personal data upon graduation.¹⁹⁰ In contrast, universities and the third-party vendors they hire often retain student data indefinitely, repurposing it to make individualized predictions and interventions without meaningful student input. These practices prioritize institutional efficiency, liability management, and revenue generation over student autonomy. For example, rather than de-identify data, institutions apply AI and predictive analytics to nudge students toward efficient educational paths, flag at-risk behaviors, or determine access to resources, effectively narrowing student choice. Despite widespread student discomfort with biometric tracking, several universities collect biometric data, such as facial images, keystroke dynamics, and emotion recognition outputs.¹⁹¹ These developments illustrate a deepening surveillance infrastructure that contrasts sharply with student preferences for clear boundaries between academic and personal spheres.

As the deployment of digital technologies that are based on pervasive student data collection coincides with a historic low of student-led governance at universities and a siloing of technology governance on campuses, three long-term implications on students crystallize.

First, the pervasive extraction of data from students is socializing them into passive roles within algorithmic systems while generating durable digital footprints with lasting implications for their future. From search activities and academic performance to personal habits and biometrics, universities collect continuous, granular data on students.¹⁹² This normalizes an environment of surveillance, habituating students to constant monitoring and management.¹⁹³ Students are forced to relinquish their privacy as a condition of accessing a resource: in this case, education. We further know that surveillance is directly harmful to students, especially marginalized ones, as they already are more

190. Kyle M. L. Jones, Abigail Gobin, Michael R. Perry, Mariana Regalado, Dorothea Salo, Andrew D. Asher, Maura A. Smale & Kristin A. Briney, *Transparency and Consent: Student Perspectives on Educational Data Analytics Scenarios*, 23 LIBRS. & ACAD. 485, 501–02 (2023).

191. See Danielle Keats Citron, *The Surveilled Student*, 76 STAN. L. REV. 1439, 1455–62 (2024).

192. *Id.*

193. *Id.* at 1459.

likely to experience surveillance in their daily lives.¹⁹⁴ University data collection and utilization practices condition students to accept surveillance and data extraction in the future. The university thus becomes a site where students are not only surveilled but actively trained to accept datafication and prediction as a prerequisite to living the life of a student, and of entering into the contract-based student-university relationship.

Students today will graduate into a labor market where productivity is increasingly quantified to improve efficiency and enhance profits.¹⁹⁵ University experiences in this context double as training in algorithmic subjection as students internalize the logic of being constantly extracted from and assessed by opaque digital systems and of being excluded from deliberations about the socio-technical outfit of a cornerstone institution like a workplace.¹⁹⁶

Moreover, the comprehensive data generated during a student's time at university does not just disappear upon graduation. This data is retained and used by the university and third-party vendors. These digital profiles may later be repurposed in ways that students never anticipated, affecting employment prospects, eligibility for immigration visas, access to credit, or insurance premiums. Universities and third party technology vendors already collaborate closely with industry and potential employers and are seeking to expand these partnerships.¹⁹⁷ Some digital technologies already in use at universities are explicitly oriented toward career planning and readiness, collecting data that

194. See Pokorny et al., *supra* note 47, at 14–17; Barton Gellman & Sam Adler-Bell, *The Disparate Impact of Surveillance*, CENTURY FOUND. (Dec. 21, 2017), <https://tcf.org/content/report/dissimilar-impact-surveillance/>.

195. IFEOMA AJUNWA, *THE QUANTIFIED WORKER: LAW AND TECHNOLOGY IN THE MODERN WORKPLACE* 36–37 (2023).

196. See, e.g., Wharton Staff, *Your Data Is Shared and Sold ... What's Being Done About It?*, KNOWLEDGE AT WHARTON (Oct. 28, 2019), <https://knowledge.wharton.upenn.edu/article/data-shared-sold-whats-done/>; see also Ulises A. Mejias & Nick Couldry, *Datafication*, 8 INTERNET POL'Y REV. 1, 3–4 (2019), <https://policyreview.info/concepts/datafication>; Jodi Kantor & Arya Sundaram, *The Rise of the Worker Productivity Score*, N.Y. TIMES (Aug. 14, 2022), <https://www.nytimes.com/interactive/2022/08/14/business/worker-productivity-tracking.html>; Ifeoma Ajunwa, *Algorithms at Work: Productivity Monitoring Applications and Wearable Technology as the New Data-Centric Research Agenda for Employment and Labor Law*, 63 ST. LOUIS U. L.J. 21, 33–34 (2018); Madeline Yingling, *Consumers Sue Amazon Over Alleged Tracking of Sensitive Data*, JURIST NEWS (Jan. 30, 2025), <https://www.jurist.org/news/2025/01/consumers-sue-amazon-over-alleged-tracking-of-sensitive-data/>.

197. Jan Lynn-Matern, *Mass Collaboration Between Employers and Universities is the Future of Higher Education | Part 1—Why Are We Investing in this Space?*, MEDIUM (Apr. 30, 2020), <https://medium.com/merge-edtech-insights/mass-collaboration-between-employers-and-universities-is-the-future-of-higher-education-part-1-ed840467bfd5>; Natalia Kucirkova, *A Partnership Industry for Impactful Ed-Tech*, STAN. SOC. INNOVATION REV. (Apr. 22, 2024), <https://ssir.org/articles/entry/ed-tech-partnership-industry>; see Justin Ménard, *Unveiling the Power of Business Partnerships in EdTech*, LISTEDTECH (Feb. 28, 2024), <https://listedtech.com/blog/unveiling-the-power-of-business-partnerships-in-edtech/>.

may alter employers' interest.¹⁹⁸ Analytics companies have even pitched universities on the idea of tracking students after graduation as a part of a broader human datafication vision.¹⁹⁹ As universities have already stated the intention to diversify their revenue streams through student data, these possibilities are even more concerning.²⁰⁰ Without safeguards or informed consent, universities and vendors could easily justify sharing student data under the guise of convenience and student support.

These developments raise significant concerns about fairness and bias in algorithmic modeling. As has already occurred in the hiring context, the creation of large-scale datasets and their use in algorithmic decision-making at universities can reproduce existing inequities.²⁰¹ At Georgia State University, for instance, a predictive analytics program disproportionately steered students of color toward lower-paying majors.²⁰² If this data and modeling continue to follow students even beyond the university, colleges risk harming students further. Many students are not even aware that their educational data can live on in such forms, and that their "data double" created during college could follow them for the rest of their lives.²⁰³ These risks highlight the asymmetry of power in campus data practices: universities and vendors reap immediate insights and cost savings, while students bear potentially lifelong consequences of a far-reaching digital footprint.

Second, the exclusion of students from governance directly undermines their agency and self-determination as digital technologies violate their intellectual privacy.

Students in higher education possess a distinct form of agency, generally understood as the right to participate in and co-decide on matters that affect

198. *Workforce EdTech Tools*, EDTECH CENTER, <https://workforceedtech.org/tools/> (last visited Aug. 17, 2025); Felicity Cartwright, *Navigating Career Paths with Innovative Ed-Tech Tools*, MENTORING TRENDS MEDIA BLOG (May 5, 2025), <https://www.mentoring-trends.com/blog/navigating-career-paths-with-innovative-ed-tech-tools>.

199. Jeffrey R. Young, *How Tech Companies Are Selling Colleges on Mass Data Collection*, EDSURGE (Oct. 18, 2019), <https://www.edsurge.com/news/2019-10-18-how-tech-companies-are-selling-colleges-on-mass-data-collection>.

200. Reisman, *supra* note 1, at 566–68; see WEINBERG, *supra* note 4, at 57–58.

201. Jeffrey Dastin, *Amazon Scraps Secret AI Recruiting Tool That Showed Bias Against Women*, REUTERS (Oct. 10, 2018), <https://www.reuters.com/article/world/insight-amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK0AG/>.

202. See MPR News Staff, *Under a Watchful Eye: How Colleges are Tracking Students to Boost Graduation*, MPR NEWS (Apr. 14, 2020), <https://www.mprnews.org/story/2020/04/14/apm-reports-under-a-watchful-eye>.

203. Mark Andrejevic & Kelly Gates, *Big Data Surveillance: Introduction*, 12 SURVEILLANCE & SOC'Y 185, 191 (2014).

themselves and others within university governance structures.²⁰⁴ This agency legitimizes their inclusion in decision-making processes, even when their formal power remains limited. Students are active contributors to the academic, social, and political life of the university.²⁰⁵ A broader argument for the agency of students can be made beyond the institutional context. Students frequently organize as a distinct political group, including in student labor unions and protests such as the 2012 Quebec student protests, the Million Student March, and the #FeesMustFall movement.²⁰⁶ They have also played prominent roles in larger social movements, including gun violence prevention and Black Lives Matter.²⁰⁷ These patterns highlight students' capacity for collective action and suggest that they constitute a unique political constituency with enduring governance aspirations. Further, if student status is a transitory yet common stage of citizenship, conceptualizing student governance as a distinct level of government offers a more comprehensive understanding of their role in public life.²⁰⁸

Yet despite their demonstrated capacity for meaningful political engagement, students are routinely denied agency within the governance structures of higher education. Most institutional decision-making remains concentrated in the hands of administrators and governing boards, with

204. Manja Klemenčič, *The Key Concepts in the Study of Student Politics and Representation in Higher Education*, in THE BLOOMSBURY HANDBOOK OF STUDENT POLS. AND REPRESENTATION IN HIGHER EDUC. 7, 10–19 (Manja Klemenčič ed., 2024).

205. See Justin Patrick, *Student Leadership and Student Government*, 7 RSCH. EDUC. ADMIN. & LEADERSHIP 1, 20–21 (2022).

206. See ROUTLEDGE HANDBOOK OF THE SOCIOLOGY OF HIGHER EDUCATION 95–97 (James E. Côté & Sarah Pickard eds., 2d ed. 2022); Parbudyal Singh, Deborah M. Zinni & Anne F. MacLennan, *Graduate Student Unions in the United States*, 27 J. LAB. RSCH. 55, 56–60 (2006); Leila Lemghalef, *Big Montreal March Marks 100 Days of Student Anger*, REUTERS CAN. (May 22, 2012), <https://web.archive.org/web/20141021021206/http://ca.reuters.com/article/domesticNews/idCABRE84H12620120522>; MALOSE LANGA, SANDILE NDELU, YINGI EDWIN, MUSAWENKOSI MALABELA, MARCIA VILAKAZI, OLIVER METH, GODFREY MARINGIRA, SIMBARASHE GUKURUME & MUNEINAZVO KUJEKE, CENTRE FOR THE STUDY OF VIOLENCE AND RECONCILIATION, #HASHTAG: AN ANALYSIS OF THE #FEESMUSTFALL MOVEMENT AT SOUTH AFRICAN UNIVERSITIES 6 (2017).

207. See ADAM FLETCHER, MEANINGFUL STUDENT INVOLVEMENT: GUIDE TO STUDENTS AS PARTNERS IN SCHOOL CHANGE 15 (2d ed. 2005); MARK EDELMAN BOREN, STUDENT RESISTANCE: A HISTORY OF THE UNRULY SUBJECT 1–2 (2001); Klemenčič, *supra* note 204, at 407; Altbach, *supra* note 150, at 335; Michael A. Goodman, *Openly Gay Undergraduate Men in Student Government: Out, Visible, and Elected*, 15 J. DIVERSITY HIGHER EDUC. 766, 767–68 (2022); Emily Bent, *Unfiltered and Unapologetic: March for Our Lives and the Political Boundaries of Age*, 11 JEUNESSE: YOUNG PEOPLE, TEXT, CULTURES 55, 60, 62 (2019); Christopher Rim, *How Student Activism Shaped The Black Lives Matter Movement*, FORBES (June 4, 2020), <https://www.forbes.com/sites/christopherrim/2020/06/04/how-student-activism-shaped-the-black-lives-matter-movement/>.

208. Patrick, *supra* note 205, at 21.

limited student representation and minimal influence over core issues such as budgeting, curriculum design, surveillance practices, and labor conditions. Even when students are granted formal roles such as board seats, these positions are often advisory. Students may be permitted to raise concerns but are rarely empowered to act on them.²⁰⁹ This exclusion is reinforced by the perception of students as transient stakeholders, whose presence on campus is temporary and whose governance claims are seen as secondary to those of permanent staff.

The student representation allowed by universities often does not translate into an exercise of student agency, but is actually just a form of consultation or high-level participation.²¹⁰ For example, non-voting student members of boards of trustees are highly visible, but are denied any decision-making power, inherently limiting the power of the office of student trustee.²¹¹ The exclusion of students from *technology* governance directly undermines their agency and self-determination in the digital sphere of campus life. Although students are the primary users of most campus technologies—generating the data that fuels analytics (from learning platforms to meal services) and bearing the consequences of its use—they are systematically denied a voice in decisions about the design, selection, or operation of these systems. This exclusion is perpetuated by the paternalistic posture of higher education institutions, which implies that institutions know better than students what technologies are appropriate, elevating the administrative interests of the university over student interests and student governance.²¹² Without genuine efforts to address the imbalances of information, power, and agency between students and institutions, this approach to technology risks recreating *in loco parentis* in the modern day, with potentially far-reaching consequences.²¹³

Students' intellectual privacy is uniquely threatened by their exclusion from decisions about the digital technologies that increasingly shape campus life. Intellectual privacy refers to the freedom to think, read, and speak in confidence, free from surveillance or interference.²¹⁴ Intellectual privacy is

209. Rebecca Freeman, *Is Student Voice Necessarily Empowering? Problematizing Student Voice as a Form of Higher Education Governance*, 35 HIGHER EDUC. RSCH. & DEV. 859, 860–61 (2016).

210. SARAH K. ELFRETH, *THE YOUNG GUARDIANS: STUDENTS AS STEWARDS OF THE PAST, PRESENT, AND FUTURE OF AMERICAN HIGHER EDUCATION* 2–3 (Cooper Anderson & Matt Strauch eds., 2011); Lozano, *supra* note 160, at 1878, 1884–85.

211. Lozano, *supra* note 160, at 1884–85.

212. See Jeffrey Alan Johnson, *Ethics and Justice in Learning Analytics*, 2017 NEW DIRECTIONS FOR HIGHER EDUC. 77, 79 (2017).

213. See Paul Prinsloo & Sharon Slade, *Student Vulnerability, Agency, and Learning Analytics: An Exploration*, 3 ETHICS & PRIV. LEARNING ANALYTICS 159, 165–66, 178 (2016).

214. NEIL RICHARDS, *INTELLECTUAL PRIVACY: RETHINKING CIVIL LIBERTIES IN THE DIGITAL AGE* 11 (2015).

foundational to the development of independent thought, creativity, and dissent in a democratic society.²¹⁵ Under constant surveillance and the fear that today's data footprints will shape tomorrow's AI systems, students may self-censor their explorations, hesitating to read controversial materials, discuss sensitive topics online, or take intellectual risks, for fear that their digital traces could be misinterpreted or later used against them.

Students' lack of intellectual privacy runs directly counter to the purportedly democratic missions of universities. American universities identify as bastions of democracy, justifying their existence and decisions to stakeholders and the public by appealing to their role in producing informed citizens, enhancing political participation, and advancing social mobility.²¹⁶ However, for students still forming world views, intellectual privacy is especially necessary for civic and intellectual development.²¹⁷ It enables civic and intellectual development by creating space to explore, critique, and construct new ideas without fear of institutional surveillance. Accordingly, intellectual privacy for students is necessary for universities to create environments in which deliberative democracy can be practiced.²¹⁸ Despite this, the current state of technology governance at universities shows that the democratic and educational mission of higher education is overshadowed by technology industry imperatives. The institutional incentives in a competitive, marketized higher education sector encourage administrations to adopt technology tools in pursuit of efficiency and control, even when these conflict with student autonomy and privacy.

215. Julie E. Cohen, *What Privacy Is For*, 126 HARV. L. REV. 1904, 1912–18 (2013); Neil M. Richards, *The Dangers of Surveillance*, 126 HARV. L. REV. 1934, 1945–53 (2013).

216. THOMAS L. PANGLE, *THE ENNOBLING OF DEMOCRACY: THE CHALLENGE OF THE POSTMODERN AGE* 181 (2021); RONALD J. DANIELS, *WHAT UNIVERSITIES OWE DEMOCRACY* 17–27 (2021); James Dean, *How Universities Can Help Strengthen Democracy*, CORNELL CHRON. (Sep. 16, 2024), <https://news.cornell.edu/stories/2024/09/how-universities-can-help-strengthen-democracy>; George F. Zook, *The President's Commission on Higher Education*, 33 BULL. AM. ASSOC. UNIV. PRESIDENTS 10, 15–17 (1947); Patricia McGuire, *Higher Education and the Defense of Democracy: Confronting the Ideology of Ignorance*, ACADEME MAG. (2025), <https://www.aaup.org/article/higher-education-and-defense-democracy>; Sjur Bergan, Ira Harkavy, Rita Hodges, Ronaldo Munck, Yadira Pinilla & Hilligje van't Land, *Higher Education Institutions Are Anchors for Democracy*, UNIV. WORLD NEWS (July 5, 2022), <https://www.universityworldnews.com/post.php?story=20220705222834768>.

217. Citron, *supra* note 191, at 1444; DANIELS, *supra* note 216, at 86–117; *see* Jonathan Koppell, *The Role of Universities in Shaping Democratic Values*, MONTCLAIR STATE UNIV. (July 8, 2024), <https://www.montclair.edu/president/2024/07/08/the-role-of-universities-in-shaping-democratic-values/>; Tony Gallagher, *The Democratic Imperative for Higher Education: Empowering Students to Become Active Citizens*, LIBERAL EDUC. (2021), <https://www.aacu.org/liberaleducation/articles/the-democratic-imperative-for-higher-education>.

218. Neil M. Richards, *Intellectual Privacy*, 87 TEX. L. REV. 387, 407–25 (2008).

Several justifications have been proffered for the exclusion of students from university governance. Some of those justifications can be principally derived from the *in loco parentis* account of students. For the Kentucky Supreme Court in *Gott v. Berea College*, the early twentieth-century case that famously embraced the *in loco parentis* doctrine, the students were “inexperienced country, mountain boys and girls of little means.”²¹⁹ While colleges recognize that students come from a variety of socioeconomic backgrounds and cater to them accordingly, the *in loco parentis* account of students as being of little experience, maturity, and understanding continues to inform attitudes towards student involvement in university governance. As one example, the American Association of University Professors identifies as the obstacle to student participation in university governance their “inexperience, untested capacity, [and] transitory status which means that present action does not carry with it subsequent responsibility.”²²⁰

These justifications for student marginalization from university governance are overbroad as they fail to account for students’ unique capacities and experiences that could be particularly beneficial for governance decisions. When it comes to technology specifically, students’ tendency to be earlier adopters and more active users can put them at a comparative advantage vis-à-vis faculty and administrators in constructing rules targeting technology.²²¹ But even if we assume that faculty’s and administrators’ capacity and experience puts them in a superior position to govern over students, decision-making theory suggests that excluding students from governance will lead to worse regulatory outcomes.

Theorists have long advocated for deliberative decision-making processes that are broadly inclusive.²²² In such processes, all members of a polity, stakeholders of an institution, or their representatives should participate in a process in which views or ideas are exchanged prior to a decision.²²³ The ultimate decisions might be the product of a consensus that emerges among participants after deliberation or a decision that a majority reaches after a hearing and consideration of all the participants’ views. There are two key elements to the deliberative process. First, it must be inclusive. And second, decisions should be the product of the considered views of the participants.

219. 161 S.W. 204, 206 (Ky. Ct. App. 1913).

220. Am. Ass’n of Univ. Professors, *supra* note 176, at 379.

221. *See* discussion *supra* notes 185–187.

222. *See, e.g.*, Joshua Cohen, *Deliberation and Democratic Legitimacy*, in *DELIBERATIVE DEMOCRACY: ESSAYS ON REASON AND POLITICS* (James Bohman & William Rehg, eds. 1997); AMY GUTMANN & DENNIS THOMPSON, *WHY DELIBERATIVE DEMOCRACY?* (2004); JOHN S. DRYZEK, *FOUNDATIONS AND FRONTIERS OF DELIBERATIVE GOVERNANCE* (2010).

223. *See, e.g.*, JAMES BOHMAN, *PUBLIC DELIBERATION: PLURALISM, COMPLEXITY, AND DEMOCRACY* 5–6, 35–36 (1996) (describing a deliberative process).

There are two principal arguments advanced for why deliberation is better than other decision-making processes. The first is that the deliberative decision-making process is more democratic. Describing consent as the core feature of democracy, James Bohman argues that “democracy implies public deliberation in some form.”²²⁴ “The deliberation of citizens,” he continues, “is necessary if decisions are not to be merely imposed upon them.”²²⁵ For that deliberative process to be truly democratically legitimate, Bernard Manin, Elly Stein, and Jane Mansbridge argue, it must also be inclusive. Since “political decisions are characteristically imposed on *all*, it seems reasonable to seek, as an essential condition for legitimacy, the deliberation of *all* or, more precisely, the right of all to participate in deliberation.”²²⁶

This argument for deliberation accords with the democracy-enhancing functions of the university. The primary purpose of American universities has been historically understood as the education of students and the creation of knowledge to produce an informed citizenry and a democratic, enlightened society.²²⁷ Indeed, scholars identify institutions of higher education as essential for maintaining and strengthening democratic practices.²²⁸ American universities, particularly public, liberal arts, and highly ranked institutions, explicitly frame their mission statements around such aims: advancing civic responsibility, fostering critical inquiry, and promoting social mobility.²²⁹ Within this framework, the structure and organization of technology governance is not solely an operational concern, but a mechanism for aligning digital technologies and practices to the values that an institution wants to perpetuate.

Some might reject the relevance of this democratic justification for a more inclusive deliberative process. Some contest the claim that universities are, or should be, democratic institutions. As a descriptive matter, universities are not particularly democratic institutions. As described earlier, American universities in their current incarnation are rather hierarchical institutions in which students, for the most part, do not consent to their governors or the rules that

224. *Id.* at 4.

225. *Id.*

226. Bernard Manin, Elly Stein & Jane Mansbridge, *On Legitimacy and Political Deliberation*, 15 POL. THEORY 338, 352 (1987).

227. See ROBERT B. WESTBROOK, JOHN DEWEY AND AMERICAN DEMOCRACY 171–72 (1991); HERBERT CROLY, THE PROMISE OF AMERICAN LIFE 405 (Arthur M. Schlesinger, Jr. ed., 1965); Albert Castel, *The Founding Fathers and the Vision of a National University*, 4 HIST. EDUC. Q. 280, 281–82 (1964).

228. See *supra* note 216.

229. Citron, *supra* note 191, at 1455–56; Courtney H. Thornton & Audrey J. Jaeger, *Institutional Culture and Civic Responsibility: An Ethnographic Study*, 47 J. COLL. STUDENT DEV. 52, 63–64 (2006); Ira Harkavy, *The Role of Universities in Advancing Citizenship and Social Justice in the 21st Century*, 1 EDUC., CITIZENSHIP & SOC. JUST. 5, 7–12 (2006).

they make.²³⁰ And for reasons we also described earlier, some argue that universities are appropriately undemocratic.²³¹ If we assume universities are not democratic and that they should not be, a deliberative decision-making process for universities grounded in democracy becomes highly questionable.

There is, however, a second argument for deliberation relevant to universities that does not depend on them being democratic institutions. That argument for a deliberative process is that it leads to better decisions. As Manin et al. explain, in a deliberative process, there is an opportunity for individuals to “listen[] to arguments formulated by others,” “broaden [their] point of view,” and “become[] aware of things [they] had not perceived at the outset.”²³² As Bernard Grofman and Scott Feld theorize, deliberation “provides information about who holds what preferences and diffuses information about why people hold the preferences that they do.”²³³ University governance often satisfies these requirements for deliberation. Many decisions are made through committee processes in which participants share information and provide arguments prior to a decision being made. Those participants tend to have experience in university governance, and some might even have expertise on the matters being addressed. The implicit assumption in university governance is that deliberative bodies comprised of individuals with deep experience and expertise will lead to optimal decisions.

Deliberative decision-making processes in universities through committees should lead to better decisions than those that arise from a more hierarchical decision-making structure. But contrary to what many might assume, a decision-making body comprised of a more homogeneous group of experienced and expert university administrators and faculty members will make worse decisions than a more diverse and inclusive deliberative decision-making process. To state differently, processes that include less experienced and less expert students will result in better decisions than those that exclude them.

In a seminal work, Lu Hong and Scott Page found that “a functionally diverse group whose members have less ability outperform a group of people with high ability.”²³⁴ These findings served as the basis for the Diversity Trumps Ability Theorem. James Surowiecki offered further support for the

230. See discussion *supra* notes 207–210.

231. See discussion *supra* notes 178–180.

232. Manin et al., *supra* note 226, at 352.

233. Bernard Grofman, David M. Estlund, Scott L. Feld & Jeremy Waldron, *Democratic Theory and the Public Interest: Condorcet and Rousseau Revisited*, 83 AM. POL. SCI. REV. 1317, 1333 (1989).

234. Lu Hong & Scott E. Page, *Groups of Diverse Problem Solvers Can Outperform Groups of High-Ability Problem Solvers*, 101 PNAS 16385, 16385 (2004).

theorem. He explains, “[d]iversity helps because it actually adds perspectives that would otherwise be absent and because it takes away, or at least weakens, some of the destructive characteristics of group decision making.”²³⁵ For the best decisions, “intelligence alone is not enough, because intelligence alone cannot guarantee you different perspectives on a problem.”²³⁶ Homogenous groups of experienced and expert people perform worse because the group members are too much alike as “each member is bringing less and less new information to the table.”²³⁷ When a group brings “new members into the organization, even if they’re less experienced and less capable,” the group becomes “smarter simply because what little the new members do know is not redundant with what everyone else knows.”²³⁸

Hélène Landemore, in her critical book on *Democratic Reason*, labels as cognitive diversity the diversity that is critical for making better decisions in a deliberative process. Cognitive diversity denotes “a diversity of perspectives (the way of representing situations and problems), diversity of interpretations (the way of categorizing or partitioning perspectives), diversity of heuristics (the way of generating solutions to problems), and diversity of predictive models (the way of inferring cause and effect).”²³⁹

Such cognitive diversity is a feature of universities with students generally bringing different backgrounds, experiences, and capacities from those of administrators and faculty. Those differences that often serve as the main justification for *excluding* students from university governance should, according to deliberative decision-making theory, be a primary reason for *including* students in university governance. Students share perspectives, interpretations, heuristics, and predictive models that will often vary from those of administrators and faculty. A university governance process inclusive of students, administrators, and faculty is therefore likely to lead to better rules applicable to university stakeholders.

Although university governance processes currently tend to be quite exclusionary, the good news is that there are very few legal constraints on creating more inclusive university governance processes. And there are no legal constraints that we have identified that would limit opportunities for creating more inclusive university technology governance processes. For public

235. JAMES SUROWIECKI, *THE WISDOM OF CROWDS: WHY THE MANY ARE SMARTER THAN THE FEW AND HOW COLLECTIVE WISDOM SHAPES BUSINESS, ECONOMIES, SOCIETIES, AND NATIONS* 38 (2004).

236. *Id.*

237. *Id.*

238. *Id.*

239. HÉLÈNE LANDEMORE, *DEMOCRATIC REASON: POLITICS, COLLECTIVE INTELLIGENCE, AND THE RULE OF THE MANY* 102 (2017).

colleges and universities, state law governs the composition of university boards and the voting power of its members. To obtain the benefits of better policy from a diverse and inclusive decision-making process, it is critical that the board includes students. As noted above, state laws in forty-two of the fifty states provide for student participation.²⁴⁰ Changes to laws in eight states to add student members could, under the deliberative decision-making model, improve those state boards' rules and regulations. But more is likely to be necessary.

Deep hierarchies in higher education that are likely related to outdated paternalistic views many faculty and administrators hold toward students could limit the deliberative benefits from a more cognitively diverse decision-making process. Further steps might therefore be necessary to ensure that the perspectives students bring from their different backgrounds and experiences are seriously considered and contribute to better decisions being made. First, state law should provide students with voting rights on the college and university boards. Currently, only twenty-seven of the forty-two states that provide for student representation on university boards give those students voting privileges. The choice to deny students voting power is a clear signal of their second-class status on the board, which reinforces paternalistic attitudes that lead to their views being marginalized or ignored in the decision-making process.

Second, state law should provide for a critical mass of student representation on the board. In the California State University study of university boards, most of the university boards with student representatives had only one student member.²⁴¹ Even with the vote, a single student member on boards ranging from seven to twenty-five members will find it challenging to overcome obstacles to their views being seriously considered. As one member, student voices can be more easily drowned out, and with one vote, the student choice will rarely be pivotal for a decision. Including a critical mass of students on boards provides for secondary and tertiary reinforcement of student views expressed during board deliberations, which adds to the likelihood that those views will be heard by other members. Including a critical mass would also make serious consideration of student views more likely because of the greater odds that students will be a pivotal vote on policy decisions.

In our research on U.S. state laws pertaining to university governance, we have not identified any legal constraints placed on university and department-level administrators regarding committee composition and member voting

240. *See supra* note 184.

241. *See* CAL. STATE UNIV. & NAT'L ASS'N OF SYS. HEADS, *supra* note 185, at 7–8.

power. But there may be obvious privacy or prudential concerns associated with placing students on certain committees, such as student disciplinary committees. However, a distinction should be drawn between student exclusions from committees that are based on prudential and privacy reasons and those exclusions from committees that are based on longstanding paternalistic views regarding the competence and capacity of students. As deliberative decision-making theory shows, it is the different backgrounds and experiences of students that add to the quality of decisions. Paternalistic-based student exclusions from committees should therefore be replaced by an orientation toward inclusion for the purpose of making better decisions.

Additionally, technology governance at the university level should leverage the culturally and cognitively diverse array of backgrounds, experiences, and competencies that students provide, their distinct technology expertise and lived experience, as well as their specific privacy and data sharing expectations. Specifically, universities can build on the position of students as a distinct political and stakeholder group and institute what we call Student Technology Councils.²⁴² Our research on student participation in technology decisions across over 6,300 U.S. universities shows that existing student technology councils or similar efforts mirror the approach of engaging students as consumers whose product feedback is solicited by university IT departments, rather than foregrounding deliberation and co-governance. These programs typically form ad hoc groups of student volunteers who are appointed, rather than elected. The Student Technology Council (STC) structure we are proposing, however, would be akin to existing student self-governance bodies, such as Honor Councils, which are responsible for investigating and adjudicating breaches of trust and policies, particularly cases involving serious breaches such as lying, cheating, or stealing. Student self-governance bodies are typically led by student-elected representatives and financially and institutionally supported by the university while remaining independent.

An STC would be comprised of elected student representatives who would not sanction technology use among students, faculty, or administrators, but serve as a representative advising body to faculty and administrators on three key areas: digital technology procurement, digital technology innovation, and digital technology and data governance. These three areas would ensure that student expertise and agency are honored and engaged when considering *what* digital technologies ought to be integrated into university life and infrastructure, *how* to use them to enhance student learning and student life,

242. Mona Sloane, *Biden's AI Executive Order Underlines Need for Student Technology Councils*, TIMES HIGHER EDUC. (Nov. 4, 2023), <https://www.timeshighereducation.com/blog/bidens-ai-executive-order-underlines-need-student-technology-councils>.

and how to *govern* them so that students' well-being and privacy are prioritized over the imperative of the private industry in technology.

Structurally, the STC would be set up similarly to the German Ethics Council (“Ethikrat”),²⁴³ an independent advisory body mandated in the German federal law and comprised of experts (appointed to four-year terms) that examines ethical, societal, scientific, medical, and legal issues and issues opinions and recommendations to the federal government and parliament on all matters of ethical significance. The Ethics Council convenes monthly and also engages the general public in ethics conversations through public events.²⁴⁴ Similarly, the STC would be comprised of students who are elected for two-year terms, who convene regularly on technology questions pertaining to the three key areas, and who issue at least one recommendation per semester while also regularly engaging the student body in technology questions on these three key areas (for example, via town halls). Additionally, the STC would advise the university on forming student-inclusive committees that touch upon technology questions on the departmental or university level, such as questions pertaining to AI use policies or data privacy in collegiate athletics. This concrete governance intervention is supported by deliberative decision-making theory and ensures universities make better and more inclusive technology decisions that build on the long history of student self-governance and participation in university governance.

VI. CONCLUSION

The integration of digital technologies, including AI, into university life has exposed deeper, longstanding fractures in the governance structures of higher education—particularly the marginalization of students in decisions that profoundly shape their life inside and outside of the classroom. The interlocking trends of growing pervasive digital technology on campuses and rapidly declining student participation in university governance put students at risk of over-surveillance, profiling, and privacy violations. Similarly, by limiting student governance, universities risk foregoing building on students' knowledge and expertise as early technology adopters and active users, and as experts in their own lives and learning. As digital technologies become ubiquitous and students become increasingly dependent on, and affected by, data-intensive systems that they neither choose nor control, a technology governance pivot is becoming urgent. Decision-making theory and historical precedent both suggest that more inclusive, participatory models of

243. *The Ethics Council*, DEUTSCHER ETHIKRAT [GERMAN ETHICS COUNCIL], <https://www.ethikrat.org/en/about-us/the-german-ethics-council/> (last visited Aug. 18, 2025).

244. *Id.*

governance lead to better outcomes—not only for innovation and efficacy, but for legitimacy and trust. Furthermore, there is no legal reason for continuing to exclude students from technology governance. Against that backdrop, establishing Student Technology Councils that are comprised of elected student representatives on two-year terms and that advise faculty and administrators on technology procurement, innovation, and governance can position students as co-governors rather than passive users.

