# Navigating Complexity Through Collaboration: Lessons from Advancing Accessibility in Engineering

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## Abstract

Revisions to the Americans with Disabilities Act (ADA) Title II required public institutions to ensure that most digital content meets accessibility standards by April 24, 2026 [1] (has since been pushed back one year). For large, decentralized institutions, implementing these requirements presents challenges related to scale, disciplinary diversity, and faculty autonomy.

This paper presents a practice-based analysis of accessibility implementation within a large, decentralized College of Engineering characterized by distributed governance, diverse academic programs, and significant faculty ownership of course design. Drawing on implementation efforts, faculty workshops, and cross-unit collaboration, this work examines how accessibility initiatives can be scaled, sustained, and adapted in such environments while addressing the practical burden placed on individual faculty for course-level remediation.

Analysis of these efforts revealed three key lessons: (1) the importance of multiplier strategies through strategic partnerships, (2) the value of reframing compliance deadlines as milestones for ongoing work, and (3) the role of faculty engagement as a source of institutional insight. These findings offer practical guidance for institutions navigating accessibility mandates in similarly decentralized contexts.


## Introduction

In December 2024, revisions to the Americans with Disabilities Act (ADA) Title II were announced to the university community, establishing a requirement that most digital content provided by public institutions—including third-party platforms—meet accessibility conformance standards by April 24, 2026. As noted in the announcement, “These revisions will impact all areas of the university.”

For large, decentralized institutions, however, the implications of such mandates extend beyond awareness to questions of interpretation, prioritization, and implementation. Within the College of Engineering (COE), these challenges were amplified by discipline-specific content such as complex technical diagrams, data visualizations, and mathematical notation, as well as a long-standing culture of faculty autonomy in course design.

While the university employed a broad dissemination strategy—news articles, professional development offerings, workshops, and webinars—local translation of these requirements was left to individual colleges and units. In response, the Graduate and Professional Studies unit partnered with the COE IT office to establish a facilitation-focused (rather than enforcement-driven) model intended to support departments and faculty in understanding and addressing accessibility expectations within their specific contexts.

Initial communications were sent to departmental points of contact in March 2025. Yet by November 2025, many faculty members remained unclear about the forthcoming compliance deadline. This disconnect between institutional messaging and local understanding became a critical inflection point in our work. Rather than accelerating short-term remediation efforts alone, we began to recognize that building sustainable infrastructure—shared practices, support mechanisms, and cross-unit partnerships—was ultimately more valuable than narrowly focusing on deadline-driven compliance.

**Institutional Context and Constraints**

Virginia Tech's College of Engineering (COE) is the largest engineering program in the Commonwealth of Virginia and the largest college within the university, enrolling over 13,000 students and supporting nearly 400 tenure and tenure-track faculty across 13 departments. The college offers a broad portfolio of undergraduate, master's, and doctoral programs spanning 18 disciplinary areas, resulting in significant variation in instructional practices, content types, and digital learning environments. This scale and disciplinary diversity shaped both the scope of accessibility work required and the strategies available for addressing it.

When revisions to ADA Title II were announced, college leaders engaged existing institutional partners, including COE IT, Technology-enhanced Learning and Online Strategies (TLOS), and the university's digital accessibility and Section 508 compliance offices. At that time, institution-wide efforts to interpret regulatory requirements were still in development. While accessibility resources had been curated and shared over multiple years, operational definitions of compliance and completion were still emerging.

In alignment with the college's decentralized structure and emphasis on faculty autonomy, a facilitation-focused model was adopted. Rather than issuing top-down mandates, the college established an accessibility advisory group to coordinate communication and support. Department chairs identified accessibility points of contact (POCs) to enable localized communication and contextual interpretation.

Recognizing that general accessibility workshops often did not address discipline-specific needs, COE leadership partnered with TLOS to adapt professional development offerings for engineering contexts, particularly related to complex visual content and mathematical notation. A graduate assistant role was also created to extend local capacity through workshops, office hours, and remediation support.

This work occurred alongside competing institutional priorities, including accreditation processes, program reviews, and broader uncertainties related to research funding and enrollment. Accessibility implementation required faculty to acquire new technical skills while managing existing responsibilities, effectively placing much of the remediation work at the course level. While central units provided valuable expertise, their ability to deliver discipline-specific support at scale was necessarily limited.

Taken together, these conditions highlighted the need for adaptive, distributed approaches to accessibility implementation.

## Approach and Guiding Questions

This paper presents a practice-based analysis of accessibility implementation within a decentralized engineering college. Rather than a formal experimental study, the work draws on iterative implementation efforts, faculty engagement through workshops and consultations, and ongoing collaboration with institutional partners.

The analysis is guided by the following questions:

(1) How can accessibility initiatives be effectively scaled in decentralized academic environments?

(2) What institutional conditions shape faculty engagement with accessibility requirements?

(3) What strategies support sustainable progress beyond compliance deadlines?

Lessons learned were identified through patterns observed across communication efforts, professional development activities, and faculty interactions over the course of the implementation period.

## Lessons Learned

### Lesson 1: Building Multiplier Strategies Through Strategic Partnerships

In a decentralized environment, sustainable accessibility efforts depend on multiplier strategies—small, targeted investments in key individuals and partnerships that extend impact beyond what centralized teams can accomplish alone.

Early in this work, it became evident that neither the Graduate and Professional Studies unit nor the College of Engineering IT office could independently provide direct accessibility remediation or individualized support to hundreds of faculty members across dozens of programs. Rather than attempting to scale support linearly, the team shifted toward a partnership-based model designed to amplify expertise through existing roles and communication networks.

One of the most effective multiplier strategies involved collaboration with the College's Digital Marketing and Communications Manager, who oversees the COE website and works closely with departmental communicators across the College. By investing in targeted accessibility training for this role—including needs assessment, interpretation of accessibility assessment reports, and hands-on use of evaluation tools—the College was able to extend accessibility support to multiple departments through a single, well-positioned individual. This approach

enabled a one-to-many model in which accessibility considerations became integrated into routine communication and content development workflows rather than treated as an external requirement.

This strategy required intentional coordination: identifying the specific accessibility challenges faced by college and departmental websites, partnering with the Technology-enhanced Learning and Online Strategies (TLOS) accessibility team to build assessment literacy, developing concise tutorials, and establishing an ongoing support structure. Importantly, the sustainability of this approach was reinforced by alignment with the communications manager's existing professional goals and responsibilities, ensuring that accessibility work was perceived as additive and enabling rather than burdensome.

A similar multiplier effect emerged through the creation of a graduate assistant role focused on accessibility initiatives. Graduate students supported faculty through office hours, workshop development, and webpage remediation while simultaneously developing accessibility expertise they could carry into future academic or professional roles. This approach not only expanded immediate capacity but also contributed to longer-term workforce development in accessibility-aware instructional practices.

Finally, the establishment of departmental accessibility points of contact (POCs) created an internal infrastructure for localized translation and feedback. These individuals served as trusted intermediaries who could contextualize accessibility guidance within disciplinary norms, relay faculty concerns, and surface emerging needs. Together, these partnerships formed a distributed support network that was more resilient and scalable than centralized remediation alone.

**Why this matters:** Rather than attempting to "do accessibility" for faculty, this approach focused on enabling others to do the work within their own contexts. For decentralized institutions with limited dedicated accessibility staff, investing in multiplier strategies offers a practical pathway for scaling impact while respecting local autonomy and expertise

**Lesson 2: Reframing the Deadline as a Milestone for Sustainable Change**

Treating the April 2026 ADA Title II compliance date as a milestone rather than a finish line enabled more strategic decision-making, reduced anxiety, and shifted focus toward building sustainable accessibility infrastructure.

In the early phases of this work, the April 24, 2026 compliance deadline was often interpreted—by faculty and support teams alike—as a fixed endpoint by which all accessibility issues would need to be resolved. Given the scale of existing digital content, the decentralized structure of the College of Engineering, and the evolving nature of institutional guidance, this framing generated significant concern about feasibility. Questions such as "What needs to be fixed by April?" and "How do we know when we are done?" underscored the tension between regulatory expectations and practical implementation realities.

Over time, it became clear that framing the deadline as a singular compliance event was counterproductive. In response, the accessibility leadership team deliberately reframed April 2026 as a milestone within a longer-term process rather than an endpoint. This reframing allowed the team to shift from an urgency-driven mindset focused on short-term remediation toward a capacity-building approach centered on sustainable practices, shared responsibility, and continuous improvement.

This change in perspective created space for more strategic investments. Rather than prioritizing exhaustive remediation of all existing content, the team focused on building infrastructure that would persist beyond the deadline. Examples included the development of a centralized College of Engineering accessibility resources webpage for faculty and staff, the creation of recorded workshops that could be reused and updated over time, and the establishment of ongoing communities of practice (e.g., Piazza-based discussion spaces) to support peer learning. Notably, a pilot initiative designed to test new accessibility support strategies was intentionally scheduled for Spring 2026—after the compliance date—reinforcing the message that accessibility work would continue beyond April.

Reframing the deadline also supported more transparent conversations with leadership and faculty. By acknowledging openly that achieving perfect compliance by April 2026 was neither realistic nor required, the team was able to focus discussions on reasonable progress, good-faith effort, and long-term commitment. This clarity reduced anxiety among faculty, increased trust in the process, and aligned leadership support with a realistic understanding of institutional capacity.

**Why this matters:** Institutions facing accessibility mandates often experience pressure to treat compliance dates as endpoints. This lesson suggests that explicitly reframing deadlines as milestones can enable more sustainable, less reactive approaches—particularly in decentralized environments where meaningful change depends on long-term cultural and infrastructural shifts rather than rapid remediation alone.

**Lesson 3: Using Faculty Engagement as a Source of Institutional Insight**

Faculty questions and workshop interactions functioned as a critical form of needs assessment, revealing discipline-specific challenges and guiding the development of more effective accessibility supports.

Professional development workshops initially served as a primary mechanism for communicating accessibility requirements and sharing general best practices. However, as faculty engagement increased, it became evident that the most valuable insights were not always found in prepared materials, but in the questions faculty asked during and after these sessions. Questions such as “How do we describe highly complex diagrams?” “Do we need to stop sharing

handwritten notes?" and "Can we still post PDF journal articles in our courses?" surfaced recurring uncertainties that were not fully addressed by generic accessibility guidance.

These interactions revealed two important patterns. First, faculty resistance to accessibility initiatives was rare; confusion and uncertainty were far more common. Second, many existing professional development resources did not adequately account for engineering-specific instructional practices, particularly those involving complex visual representations, mathematical notation, and legacy course materials in Canvas. In this way, faculty questions became a form of real-time diagnostic data, highlighting gaps between policy-level expectations and day-to-day instructional realities.

Recognizing this, the accessibility team began to treat workshops and office hours as discovery spaces rather than one-directional training events. Insights gained from faculty interactions directly informed subsequent resource development and partnership decisions. For example, recurring questions about complex images and equations prompted closer collaboration with TLOS to research and adapt best practices specifically for engineering contexts. Similarly, faculty concerns about workload and time investment influenced decisions to prioritize guidance on new content creation alongside remediation strategies.

Faculty engagement also illuminated opportunities for leveraging graduate student support. As faculty articulated the practical challenges of remediating large, content-heavy courses, the team recognized that trained graduate assistants could play a meaningful role in supporting accessibility efforts while gaining valuable professional experience. Additionally, feedback from departmental accessibility points of contact created two-way communication channels that allowed local concerns to inform college-level planning.

**Why this matters:** In complex, decentralized systems, formal assessments alone may fail to capture the realities of instructional practice. Treating faculty engagement as an ongoing source of institutional intelligence enables more responsive, context-sensitive support and helps ensure that accessibility initiatives address real needs rather than assumed ones.

**Discussion and Implications**

Advancing digital accessibility within a large, decentralized engineering college required more than technical guidance or compliance timelines; it required adaptive strategies aligned with institutional culture, faculty autonomy, and evolving regulatory interpretations.

The lessons presented in this paper reflect a shift from compliance-driven remediation toward sustainable capacity-building. Multiplier strategies enabled scalable support through existing roles and networks. Reframing the compliance deadline reduced anxiety and supported long-term planning. Faculty engagement provided critical insight into real instructional challenges, allowing for more responsive and context-specific solutions.

These findings suggest that institutions navigating accessibility mandates may benefit from focusing less on uniform enforcement and more on enabling distributed action through shared infrastructure, realistic expectations, and continuous learning. In decentralized environments, accessibility is most effectively advanced not as a one-time compliance task, but as an ongoing institutional commitment embedded within teaching and learning practices.

**References**

[1] Office for Civil Rights Compliance and Prevention Education, “Title II compliance target date announced, resources available,” *Virginia Tech News*, July 9, 2025. [Online]. Available: news.vt.edu [Accessed July 9, 2025] ADA Title II compliance target date announced, resources available | Virginia Tech News | Virginia Tech