

Teaching Case

Accessibility Initiative: Developing a Digital Accessibility Strategy for an Information Systems and Computing Department

Michael Whitney
whitneym@winthrop.edu

David Scibelli
scibellid@winthrop.edu

Winthrop University
Rock Hill, SC, 29733, USA

Hook

An accessibility planning committee has been charged with the development of a strategic plan that will serve as the model for a digital accessibility initiative. With a limited budget and one academic year to show progress, this committee must balance compliance, instructional quality, faculty and staff workload, and initiative sustainability.

Abstract

Digital accessibility legislation requires post-secondary institutions to ensure digital resources are accessible to all. This case study establishes a scenario where an information systems and computing department at a university is to design and implement a digital accessibility improvement pilot program, whereupon its success, it will be deployed throughout the institution. The project is constrained by a fixed budget, a one-academic-year timeline, existing personnel, and available university resources. The role of the students in this exercise is to develop an implementation strategy that balances organizational priorities and available resources. In addition, the students will learn how to communicate and collaborate effectively, lead projects, and develop critical thinking skills necessary in managing large projects.

Keywords: Organizational planning, implementation strategy, project management, resource allocation, digital accessibility, higher education

Accessibility Initiative: Developing a Digital Accessibility Strategy for an Information Systems and Computing Department

Michael Whitney and David Scibelli

1. INTRODUCTION

Providing equal access to digital resources is an important issue for academic institutions. As regulatory requirements evolve, so too must institutional practices. To do so, limited resources must be allocated, competing priorities must be taken into consideration, and regulatory requirements must be met. While digital accessibility provides the backdrop for this teaching case, the educational focus is on organizational planning, resource allocation, stakeholder management, and implementation strategy.

This case challenges students to serve on an accessibility planning committee charged with creating a one academic year implementation strategy for the University's Department of Information Systems and Computing. The committee's overall goal is to develop a model for the development, deployment, and maintenance of accessible digital assets across campus. During this process, students will consider budget, staffing, and organizational objectives and limitations as they analyze data and develop a realistic implementation strategy. Students should also consider whether elements of the proposed strategy could realistically be scaled and adapted for use by other departments across the university.

2. BACKGROUND

Preston University's College of Business and Technology's Department of Information Systems and Computing will serve as a pilot project for an upcoming campus-wide digital accessibility initiative. The provost requested that the accessibility planning committee develop an implementation plan that can be replicated campus-wide.

The Information Systems and Computing Department conducted a recent accessibility audit of its departmental digital assets. The audit identified multiple accessibility barriers in course materials, Learning Management Content (LMS), videos, websites, forms, and other instructional and departmental resources. The department also surveyed its faculty and staff about accessibility knowledge and concerns. Findings from the audit and survey are summarized in the accompanying exhibits. Overall, the department supports the accessibility initiative but is constrained by finite financial resources, varying expertise, limited educational opportunities, competing priorities, and a tight implementation schedule.

Students will serve as members of the accessibility planning committee responsible for developing the department's implementation strategy. To this end, the committee will need to consider how to prioritize accessibility efforts in a manner that balances compliance, instructional quality, faculty and staff workload, and initiative sustainability.

3. DECISION POINT

The provost has allocated \$50,000 to the committee's creation and implementation of this project. The implementation strategy developed by the committee will serve as the model for future campus-wide adoptions. In addition, no future budget has been approved. To that end, the developed model must use existing resources, personnel, and the current budget. The provost expects measurable progress in one academic year including the development of a realistic implementation strategy that balances compliance, instructional quality, faculty and staff workload, financial constraints, and overall sustainability.

4. PROJECT OBJECTIVES

As members of the accessibility planning committee, your team has been asked to develop an implementation strategy for the provost. Using the information provided in the case exhibits, prepare

recommendations that:

- Prioritize the department's accessibility improvement efforts.
- Recommend how the available budget, personnel, and campus resources should be allocated.
- Define appropriate faculty and staff responsibilities.
- Recommend how existing and potential accessibility technologies should be incorporated into the implementation strategy.
- Develop an implementation strategy that can be completed within one academic year.
- Recommend measures for evaluating project success and supporting long-term sustainability.

Support each recommendation using evidence contained in the case exhibits. Multiple implementation strategies may be appropriate provided they are feasible, well justified, and responsive to the organizational constraints presented in the case.

5. EXHIBITS

5.1 Exhibit A: Department Profile

Item	Summary
University	Preston University (Regional Public University)
College	College of Business and Technology
Department	Information Systems and Computing
Students Served	~650 undergraduate majors
Faculty	20 full-time; 5 adjunct
Staff	3 full-time
Academic Programs	Information Systems, Computer Science, Cybersecurity, Data Analytics, Information Technology, Software Engineering, Web & Application Development
Mission	Prepare graduates to solve organizational and technical problems through computing, information systems, data analysis, cybersecurity, and emerging technologies.

Table 1: Department Overview

Instructional Environment

- **Learning Management System:** Blackboard
- **Course Delivery:** Face-to-face, online, and hybrid
- **Common Technologies:** Microsoft 365, Panopto video service, MS Teams, virtual labs, cloud computing platforms, publisher digital resources
- **Instructional Materials:** Faculty independently develop and maintain most digital course content.

Digital Resource	Approximate Quantity	Primary Owner
Blackboard course sites	165	Faculty
Instructional videos	720	Faculty
PDF documents	2,100	Faculty
Microsoft Office documents	1,400	Faculty
Department websites	95	Staff
Images and graphics	2,600	Faculty
Online forms and surveys	30	Faculty & Staff
Resource counts represent instructional and departmental materials currently being maintained.		

Table 2: Department Digital Resources

Project Parameters

- **Approved Budget:** \$50,000

- **Implementation Period:** One academic year
- **Project Sponsor:** Provost, Preston University
- **Expected Outcome:** Develop an accessibility implementation plan that can be utilized by other academic departments across the university.

An initial accessibility audit has been completed by the campus' IT accessibility assessment team. The remaining exhibits provide assessment results, stakeholder feedback, resource constraints, technology alternatives, and project timeline needed to develop the department's implementation strategy.

5.2 Exhibit B: Accessibility Audit Summary

Executive Summary

The initial accessibility audit of the department's digital profile revealed digital accessibility barriers across multiple content types. While recently deployed departmental materials did have a higher accessibility score, independently developed materials tended to score lower.

The Estimated Accessibility Score represents the percentage of accessibility checks passed within the reviewed sample; higher scores indicate fewer identified accessibility barriers.

Asset Type	Sample Reviewed	Estimated Accessibility Score	Priority
Blackboard course sites	40	72%	High
PDF documents	200	48%	High
Instructional videos	85	54%	High
Department websites	35	81%	Medium
Online forms	20	92%	Low

Table 3: Summary of Assessment Results

Most Common Accessibility Findings	Frequency
Missing alternative text	High
Improper heading structure	High
Untagged or improperly tagged PDF documents	High
Missing video captions	High
Insufficient color contrast	Medium
Non-descriptive hyperlinks	Medium
Improper table structure	Medium
Keyboard navigation issues	Low

Table 4: Common Accessibility Issues

Observations

- Recently developed courses generally demonstrate stronger accessibility practices than older courses.
- Most issues can be corrected without redesigning course content.
- Video captioning and document remediation represent the largest anticipated workload.
- Faculty expressed interest in additional training and practical support resources.

Overall Assessment

The assessment team believes that the department is positioned to bring its digital content into compliance. They believe that a phased continuous improvement strategy would be appropriate for addressing current and future issues. Priority should be given to courses with the highest enrollment, documents with the highest use, and materials with the greatest number of barriers.

5.3 Exhibit C – Faculty Accessibility Survey

Survey Overview

- Respondents: 18 of 20 full-time faculty (90%)
- Survey administered following the departmental accessibility assessment
- Results summarized to guide implementation planning

Survey Question	Agree/Strongly Agree
I understand the university's accessibility expectations.	39%
I know how to create accessible Word and PDF documents.	33%
I know how to make my Blackboard course accessible.	44%
I know how to caption or obtain captions for instructional videos.	28%
I would feel comfortable helping another faculty member improve accessibility.	17%

Table 5: Faculty Confidence

Barrier	Faculty Selecting
Lack of time	83%
Need for additional training	72%
Large number of existing course materials	67%
Uncertainty about legal requirements	56%
Difficulty remediating PDFs	50%
Third-party publisher materials	39%

Table 6: Perceived Barriers

Preferred Resource	Faculty Selecting
Hands-on workshops	72%
One-on-one consultations	61%
Blackboard accessibility checker/training	56%
Step-by-step guides and checklists	50%
Student assistants for document remediation	44%
Department accessibility specialist	39%

Table 7: Preferred Support

Selected Faculty Comments

- "I'm willing to improve my courses, but I don't know where to start."
- "Most of my materials have been refined over many years. Updating everything in one year isn't realistic."
- "The PDF documents concern me the most. They seem much harder to fix than Word files."
- "If someone could review my course and tell me what needs attention first, that would save a lot of time."

5.4 Exhibit D – Budget and Staffing

Project Funding

The Provost has allocated **\$50,000** in one-time funding to support the committee's digital accessibility initiative during the upcoming academic year. The implementation plan should emphasize sustainable

improvements while making effective use of existing university resources. Any unused funds will revert to the college at the end of the fiscal year.

Existing University Resources

The following resources are already available to the department at no additional cost:

Resource	Availability
Online accessibility training modules	Available to all faculty and staff
Instructional Design services	Up to 10 consultation hours per month
Disability Services	Accessibility consultation upon request
Information Technology Services	Technical support for approved instructional technologies
Panopto and Microsoft 365 accessibility tools	Available through existing university licenses
IT accessibility assessment team	Available to assess digital assets for accessibility issues

Table 8: Existing University Resources

Resource	Availability
Faculty	Responsible for improving the accessibility of their own instructional materials
Administrative assistant	Approximately 5 hours per week available for project coordination
Student employees	May be hired using project funds
No additional full-time positions	Permanent positions may not be created

Table 9: Department Staffing

Resource or Service	Estimated Cost
External accessibility workshop (discipline-specific)	\$3,500
Faculty summer accessibility stipend	\$2,000 per faculty member
Faculty accessibility mini-grant	Up to \$1,500 each
Student accessibility assistant	\$18/hour
Graduate assistant (shared appointment)	\$12,000 per academic year
Faculty accessibility coordinator (one course release)	\$6,000
Department accessibility awareness events	\$1,000
Printed and online instructional materials	\$500

Table 10: Potential Budget Investments

Workload Planning Considerations

The time required to address accessibility issues varies based on the type, complexity, and condition of the digital material. The following considerations should be used when evaluating staffing and resource needs.

The department should not assume that all identified accessibility issues can be addressed during the initial implementation period. The implementation team must determine a feasible initial implementation scope based on its priorities, staffing model, and allocation of available resources.

Workload Factor	Planning Consideration
Documents	Remediation effort varies based on document length, formatting, tables, images, and other content elements.
Video Content	Automated captioning may reduce initial effort, but captions require review and correction for accuracy.
Course Materials	Courses with large quantities of independently developed documents, videos, or interactive materials may require greater remediation effort.
Student Assistants	Student assistants may perform routine remediation and testing activities after training but require supervision and quality review.
Faculty Effort	Faculty involvement is necessary when remediation requires decisions involving instructional content, organization, or meaning.

Table 11: Workload Planning Considerations

Planning Constraints

- Total expenditures may not exceed **\$50,000**.
- The implementation must be completed within **one academic year**.
- Faculty teaching loads may not be reduced except through an approved course release.
- Existing university accessibility resources should be used whenever practical.
- The department should recommend an implementation plan that can be sustained after the one-time funding has been exhausted.

5.5 Exhibit E – Implementation Strategy Options

Accessibility Implementation Approaches Identified During Preliminary Planning

Prior to the creation of the accessibility planning committee, the department chair worked with select faculty and staff to develop several ideas on how to address accessibility issues. These ideas are shared with the intent of promoting discussion rather than representing an official recommendation.

Ideas	Potential Benefits	Potential Challenges
Faculty-Led Remediation	Develops long-term faculty expertise and ownership of accessible course materials. Little additional staffing required.	Requires substantial faculty time and may result in uneven progress across courses.
Student Accessibility Assistant Program	Student employees assist with document remediation, caption review, and accessibility testing under faculty supervision, reducing faculty workload.	Requires hiring, training, supervision, and quality assurance. Students cannot make instructional decisions independently.
Faculty Incentive Program	Provides stipends or mini-grants to encourage faculty participation and accelerate accessibility improvements.	Participation may vary, and incentives may not ensure consistent implementation across all courses.
Faculty Accessibility Coordinator	Designates a faculty member to coordinate training, provide peer support, monitor progress, and serve as a departmental resource.	Requires a course release or reassigned duties, reducing teaching capacity.
High-Impact Course Prioritization	Focuses resources on courses with the largest enrollments or those required by multiple degree programs, providing the greatest immediate student impact.	Some courses and materials may receive limited attention during the first implementation year.

Table 12: Conceptualized Accessibility Implementation Approaches

Planning Considerations

During preliminary planning, several questions were identified that should be considered when selecting an implementation approach:

- How should limited funds be allocated among training, staffing, incentives, and faculty support?
- Should accessibility efforts focus on all courses or prioritize those with the greatest student impact?
- What balance should be maintained between faculty responsibility and centralized support?
- How should progress be monitored throughout the implementation year?
- How can improvements be sustained after the one-time funding has been exhausted?
- How should accessibility technologies be selected, supported, and integrated into existing instructional systems and processes?

Preliminary Planning Observations

- Existing university accessibility training and consultation services are available and should be incorporated into the implementation plan whenever practical.
- Faculty remain responsible for the academic content of their courses.
- Student employees may assist with technical remediation tasks under faculty supervision.
- Additional implementation approaches may be appropriate depending on departmental priorities and available resources.

5.6 Exhibit F – Implementation Timeline

Proposed Project Milestones

The provost expects the department to complete the initial accessibility implementation within one academic year. The preliminary planning committee identified the following project timeframes to guide implementation. The implementation team is responsible for establishing appropriate milestones for each timeframe.

Timeframe	Expected Milestone
Beginning of Academic Year	To be determined by the implementation team.
Early Academic Year	To be determined by the implementation team.
Mid-Year	To be determined by the implementation team.
Second Half of Academic Year	To be determined by the implementation team.
End of Academic Year	To be determined by the implementation team.

Table 13: Proposed Project Milestones

Expected Project Outcomes

By the conclusion of the academic year, the department should be able to demonstrate progress in the following areas:

- Faculty have participated in accessibility training or support activities.
- Priority instructional materials have been reviewed and improved.
- A process has been established for creating accessible instructional materials in future courses.
- Progress has been documented and communicated to college leadership.
- Recommendations have been developed for continued accessibility improvements beyond the initial implementation period.

Project Success Considerations

The planning committee identified several indicators that may be used to evaluate implementation success.

- Completion of planned accessibility activities within the approved budget.
- Demonstrated improvement in the accessibility of high-priority instructional materials.
- Faculty participation in accessibility initiatives.
- Effective use of existing university support resources.
- A sustainable process for maintaining accessibility after the initial implementation period.

6. AI Use Disclosure

Generative artificial intelligence (OpenAI ChatGPT, GPT-5.5) was used during the development of this teaching case to assist with drafting, content development, and editorial refinement. Any generated content was reviewed, edited, and verified for accuracy by the authors.