

Accessibility Compliance Framework

1. Executive Summary

Our comprehensive Accessibility Compliance Framework ensures that all components of the NYC Public Schools system will be designed, developed, and implemented to meet or exceed all federal, state, and local accessibility requirements. We understand that accessibility is not just a compliance checkbox but a fundamental right for all students, teachers, administrators, and parents in the NYC DOE ecosystem.

This framework outlines our approach to delivering a fully accessible solution that adheres to ADA (Americans with Disabilities Act), Section 508 of the Rehabilitation Act, WCAG 2.1 AA standards, and NYC DOE-specific accessibility requirements. Our implementation methodology integrates accessibility into every phase of the project lifecycle, from initial planning through deployment and ongoing maintenance.

Our Commitment: Every student, teacher, administrator, parent, and community member, regardless of ability, will have equitable access to all digital resources and tools provided through this system.

2. Accessibility Standards and Regulatory Framework

2.1 Applicable Laws, Regulations, and Standards

Our solution will comply with the following standards and regulations:

Standard/Regulation	Description	Implementation Approach
WCAG 2.1 Level AA	World Wide Web Consortium's Web Content Accessibility Guidelines covering a wide range	Full implementation of all Level A and AA success criteria, with selected AAA

	of recommendations for making web content more accessible	features where beneficial to NYC DOE users
Section 508 of the Rehabilitation Act	Federal requirement for all electronic and information technology to be accessible to people with disabilities	Complete adherence to technical requirements and functional performance criteria
Americans with Disabilities Act (ADA)	Civil rights law prohibiting discrimination against individuals with disabilities	Ensuring equal access and opportunity for all NYC DOE stakeholders
New York State Human Rights Law	State law requiring accessibility for persons with disabilities	Compliance with all state-specific requirements beyond federal standards
NYC Human Rights Law	City law prohibiting discrimination on the basis of disability	Adherence to all NYC-specific accessibility requirements
NYC DOE Accessibility Requirements	Education-specific accessibility standards for NYC public schools	Implementation of all DOE-specific requirements and best practices

2.2 WCAG 2.1 AA Compliance Focus Areas

Our implementation will address all four principles of WCAG:

Principle	Description	Implementation Examples
Perceivable	Information and user interface components must be presentable to users in ways they can perceive	<ul style="list-style-type: none"> • Text alternatives for all non-text content • Captions and audio descriptions for multimedia • Content adaptable and distinguishable from background

		<ul style="list-style-type: none"> • Color is not used as the only visual means of conveying information
Operable	User interface components and navigation must be operable by all users	<ul style="list-style-type: none"> • Full keyboard accessibility • Sufficient time to read and use content • No content that could cause seizures or physical reactions • Multiple ways to locate content
Understandable	Information and operation of user interface must be understandable	<ul style="list-style-type: none"> • Readable and predictable content • Consistent navigation and identification • Input assistance to help users avoid and correct mistakes • Support for multiple language options for NYC's diverse population
Robust	Content must be robust enough to be reliably interpreted by a wide variety of user agents, including assistive technologies	<ul style="list-style-type: none"> • Compatible with current and future assistive technologies • Valid HTML/CSS and proper ARIA implementation • Device-agnostic design for compatibility with a wide range of devices and platforms

3. Comprehensive Accessibility Implementation Strategy

3.1 Governance and Accountability

Implementation Approach

- **Dedicated Accessibility Team:** We will establish a cross-functional accessibility team led by a certified accessibility expert who will oversee all accessibility-related activities throughout the project lifecycle.
- **Executive Sponsorship:** A senior executive will be designated as the Accessibility Champion with direct responsibility for ensuring compliance.
- **Regular Reporting:** Monthly accessibility compliance reports will be provided to NYC DOE stakeholders.
- **Accountability Matrix:** Clear roles and responsibilities for accessibility will be defined for all team members with specific Key Performance Indicators (KPIs).

3.2 Design Phase Approach

Implementation Approach

- **Inclusive Design Methodology:** We will implement Microsoft's Inclusive Design methodology, centering design decisions around users with the widest range of abilities and contexts.
- **Design System:** Development of a fully accessible design system with pre-approved, tested components that meet all accessibility standards.
- **Color Contrast Analysis:** All color combinations will be validated against WCAG 2.1 AA contrast requirements (4.5:1 for normal text, 3:1 for large text).
- **Font Selection:** Implementation of readable, scalable fonts optimized for screen reading and low vision users.
- **User Interface Patterns:** All UI patterns will be vetted against accessibility best practices before implementation.
- **Persona Development:** Creation of specific personas representing users with various disabilities to guide design decisions.

3.3 Development Phase Approach

Implementation Approach

- **Accessibility-First Coding:** Implementation of accessible code from the ground up rather than retrofitting accessibility later.
- **Semantic HTML:** Proper use of semantic HTML elements (headings, landmarks, lists) to create a logical document structure.
- **ARIA Implementation:** Appropriate use of ARIA roles, states, and properties when HTML semantics are insufficient.
- **Keyboard Accessibility:** Ensuring all functionality is accessible via keyboard, with visible focus indicators and logical tab order.
- **Automated Testing:** Integration of accessibility linting tools into CI/CD pipeline (Axe, Wave, Lighthouse).
- **Component Library:** Development of pre-tested, accessible components for consistent implementation.

3.4 Testing and Validation

Implementation Approach

- **Multi-Layered Testing Approach:**
- **Automated Testing:** Implementation of Axe Core, WAVE, and Lighthouse for automated scanning of all pages and components.
- **Manual Expert Testing:** Comprehensive checklist-based testing by certified accessibility professionals.
- **Assistive Technology Testing:** Verification with:
 - Screen readers (JAWS, NVDA, VoiceOver, TalkBack)
 - Screen magnifiers (ZoomText, Windows Magnifier)
 - Speech recognition software (Dragon)
 - Alternative input devices (switches, eye tracking)
- **User Testing:** Involving people with disabilities in usability testing sessions.
- **Continuous Validation:** Regular accessibility audits throughout the development process.

- **Documentation:** Comprehensive accessibility conformance reports with remediation plans for any issues.

3.5 Content Creation Guidelines

Implementation Approach

- **Training:** Comprehensive training for all content creators on accessibility best practices.
- **Document Templates:** Creation of accessible templates for all document types (Word, PowerPoint, PDF).
- **Multimedia Guidelines:** Requirements for captioning, audio descriptions, and transcripts for all audio/video content.
- **Alt Text Standards:** Guidelines for writing effective alternative text for images, charts, and graphics.
- **Plain Language:** Content creation standards that emphasize clarity and simplicity, especially important for users with cognitive disabilities.
- **Content Management System:** Implementation of accessibility checks within the CMS workflow.

3.6 Training and Support

Implementation Approach

- **Role-Based Training Program:**
- **Developers:** Intensive training on accessible coding patterns, ARIA implementation, and testing methodologies.
- **Designers:** Training on inclusive design principles, color contrast, and creating accessible visual patterns.
- **Content Creators:** Guidelines for creating accessible documents, multimedia, and alt text.
- **QA Personnel:** Training on accessibility testing tools and methodologies.
- **Project Managers:** Training on accessibility requirements, timelines, and resource allocation.

- **Documentation:** Comprehensive accessibility guidelines and reference materials.
- **Continuous Education:** Regular updates and refresher courses as standards evolve.

4. NYC DOE-Specific Accommodations

4.1 Multilingual Accessibility

Implementation Approach

- **Language Support:** Implementation of accessibility features across all 9 DOE-supported languages (Spanish, Chinese, Bengali, Arabic, Urdu, Haitian Creole, Russian, Korean, and French).
- **RTL Support:** Full right-to-left language support for Arabic and Urdu, ensuring all accessibility features work correctly.
- **Translation Quality:** Professional translation services with expertise in educational terminology.
- **Screen Reader Compatibility:** Testing with screen readers that support multiple languages.
- **Language Switching:** Accessible language selection mechanisms that work with keyboard-only and screen reader navigation.

4.2 Educational Accessibility Considerations

Implementation Approach

- **IEP Accommodations:** Support for specific accommodations identified in Individual Education Plans.
- **Alternative Assessment Formats:** Accessible options for all assessment types.
- **Assistive Technology Integration:** Compatibility with specialized educational assistive technologies used in NYC DOE schools.
- **Differentiated Learning Paths:** Accessibility features supporting differentiated instruction for diverse learners.

- **Parent Portal Accessibility:** Ensuring all parent/guardian interfaces meet accessibility standards for the diverse NYC community.

4.3 Mobile and Tablet Accessibility

Implementation Approach

- **Responsive Design:** Implementation of fully accessible responsive design for all screen sizes and orientations.
- **Touch Target Sizing:** Following WCAG guidelines for touch target size (minimum 44px by 44px).
- **Mobile Screen Reader Support:** Optimization for VoiceOver (iOS) and TalkBack (Android).
- **Gesture Alternatives:** Providing alternatives for complex gestures.
- **Mobile Keyboard Accessibility:** Support for external keyboards with mobile devices.
- **Testing:** Comprehensive accessibility testing on DOE-approved mobile devices and tablets.

5. Implementation Timeline and Milestones

5.1 Phased Implementation Approach

Phase 1: Foundation (Months 1-2)

- Establish accessibility governance structure
- Develop detailed accessibility requirements based on NYC DOE needs
- Create accessibility design system and component library
- Implement automated testing in CI/CD pipeline
- **Milestone:** Approved Accessibility Plan and Testing Framework

Phase 2: Development and Initial Testing (Months 3-6)

- Implement accessible front-end architecture
- Develop core accessible components

- Begin progressive accessibility testing
- Conduct training for all team members
- **Milestone:** Component Library with Accessibility Documentation

Phase 3: Comprehensive Testing (Months 7-9)

- Complete full accessibility testing with assistive technologies
- Conduct user testing with individuals with disabilities
- Verify multilingual accessibility
- Address and remediate any identified issues
- **Milestone:** Accessibility Conformance Report

Phase 4: Validation and Rollout (Months 10-12)

- Independent third-party accessibility audit
- Final remediation of any outstanding issues
- Development of ongoing accessibility maintenance plan
- Training for NYC DOE personnel
- **Milestone:** Fully Compliant Accessible System

6. Continuous Improvement and Maintenance

6.1 Ongoing Monitoring and Maintenance

Implementation Approach

- **Automated Monitoring:** Implementation of automated accessibility scanning on a scheduled basis to identify any regression.
- **Accessibility Helpdesk:** Dedicated channel for users to report accessibility issues.
- **Regular Audits:** Quarterly accessibility audits by certified professionals.
- **Standards Updates:** Process for implementing updates as accessibility standards evolve.
- **Feedback Loop:** System for collecting and acting on accessibility feedback from NYC DOE users.

6.2 Knowledge Transfer to NYC DOE

Implementation Approach

- DOE Staff Training:** Comprehensive training program for NYC DOE technical and content staff.
- Documentation:** Detailed accessibility documentation for all system components.
- Sustainability Plan:** Long-term plan for maintaining accessibility as the system evolves.
- Tools Transfer:** Provision of accessibility testing tools and processes to NYC DOE team.

7. Accessibility Performance Metrics

Metric	Target	Measurement Approach
WCAG 2.1 AA Compliance Rate	100%	Automated and manual testing against all success criteria
User Satisfaction (Users with Disabilities)	≥90%	Specialized user testing and feedback surveys
Assistive Technology Compatibility	100%	Testing with all required assistive technologies
Issue Remediation Time	Critical: 24 hours High: 3 days Medium: 1 week Low: 2 weeks	Time from issue identification to resolution
Accessibility Support Response Time	≤4 hours during business hours	Time to respond to accessibility support requests

8. Conclusion

Our Accessibility Compliance Framework represents our comprehensive commitment to ensuring that every NYC student, teacher, administrator, and parent, regardless of ability, can fully access and benefit from the system. By embedding accessibility into every aspect of our design, development, and implementation process, we will deliver a solution that not only meets all legal requirements but truly supports the NYC DOE's mission of providing equitable education for all students.

This framework is not a static document but a living process that will evolve throughout the project lifecycle to address new challenges and incorporate emerging best practices. We look forward to partnering with the NYC DOE to create a model of digital accessibility excellence.

For NYC DOE, accessibility is not just compliance, but a commitment to equity in education. Our solution embodies this principle at every level.