**National Center on
Accessible Educational Materials**

AEM Quality Indicators
with Critical Components
for Higher Education

Institutes of Higher Education

V.2.0

By National AEM Center at CAST

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IDEAs
that Work
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Preface

The purpose of the National AEM Center's Quality Indicators with Critical Components for Higher Education is to assist institutes of higher education, both at the system and campus level, with planning, implementing, and evaluating dynamic, coordinated systems for providing accessible materials and technologies for all students who need them. The ultimate goal of an AEM provision system is that accessibility becomes an essential criterion in the procurement and creation of high-quality educational materials and technologies. To that end, the Quality Indicators with Critical Components are a means to provide institutions with consistent objectives, and to promote discussion around multiple methods to achieve those objectives.

The Quality Indicators are brief statements that point to exemplifying conditions and services for creating and sustaining a systemwide high-quality AEM provision system. Institutes of higher education, both universities and community colleges, will find the Quality Indicators useful for implementing statutory requirements that mandate equitable access to learning opportunities for students with disabilities, including equal access to printed materials, digital materials, and technologies. Beyond meeting legal obligations, users of the Quality Indicators will benefit from collaboration among cross-sector agency leaders and diverse stakeholder groups. Ideally, new partnerships will lead to systemic improvements in the provision and use of high-quality materials and technologies for all learners.

The Quality Indicators with Critical Components for Higher Ed are intended to be implemented in partnership with a state education agency (SEA) that is creating and sustaining a statewide AEM provision system for K-12. University and community college systems should coordinate with the SEA to ensure that higher ed students with disabilities are benefitting from that provision system, as well as its own best practices aligned with the Quality Indicators with Critical Components for Higher Ed.

Quality Indicator 1: A Coordinated System

Statement: The **institution has a coordinated system** for providing high-quality accessible materials and technologies for all students with disabilities who need them.

Intent: A coordinated system means that the institution has methodical and integrated means by which students who need them receive accessible formats of instructional materials, accessible digital materials, accessible technologies, and the assistive technology needed to use them.

Critical Components for Quality Indicator 1

To effectively address Quality Indicator 1, the following components should be present:

1.1. Effective planning and communication among collaborators who are important to creating and sustaining a coordinated system of providing high-quality accessible materials and technologies

- Example of an important collaboration at the university or community college system level:
    - A digital technology accessibility committee with cross-functional representation of personnel including but not limited to system and campus administration, EIT/ICT, disability/accessibility services, faculty, instructional design, procurement, and students with disabilities
- Examples of key personnel at the campus level that can form collaborations important to sustaining a coordinated system
    - Deans
    - Department chairs
    - ADA and Section 504 Coordinator
    - EIT/ICT personnel
    - Instructional design personnel
    - Center for teaching and learning personnel
    - Disability/accessibility services personnel
    - Students receiving accommodations

- o Diversity officer
- o Faculty
- o Library personnel
- o Procurement personnel
- o Learning Management System (LMS) administrators
- Examples of state-level service providers that can serve as collaborators
  - o State Assistive Technology (AT) Program
  - o Rehabilitation Services
  - o State Instructional Materials Center (IMC)

1.2. A means for ensuring that digital materials and technologies purchased or created for use by all students are accessible

- All digital materials and technologies purchased from commercial, open, and free sources comply with Section 508 of the Rehabilitation Act and the current version of the Web Content Accessibility Guidelines (WCAG) at level AA.
- Personnel who create digital materials (e.g., videos, web pages, and slide decks) use the accessibility practices afforded by common software tools, such as web authoring software, Google Suite, Microsoft Office, iWork, and YouTube.

1.3. A means for ensuring the provision of accessible formats of print textbooks and related core materials with appropriate copyright protection

- Some students with disabilities have difficulty using print and certain digital instructional materials because these formats present physical, sensory, or perceptual barriers for them. Under criteria set by the National Library Service, eligible individuals can receive accessible formats of materials under copyright (e.g., braille, large print, digital text, or audio formats of a textbook). Sources of accessible formats of copyrighted materials for eligible students include restricted libraries, such as Bookshare, Louis Database, and Learning Ally. Additionally, accessible formats of copyrighted materials can be requested on behalf of eligible students via AccessText or directly from the publisher.

Quality Indicator 2: Provision in a Timely Manner

Statement: The institution provides **high-quality accessible materials and technologies in a timely manner**.

Intent: In general, "timely manner" means students who require accessible materials and technologies receive them at the same time that materials and technologies are

distributed to all students. Attention is given to identify and address factors that could delay timely manner.

Critical Components for Quality Indicator 2

To effectively address Quality Indicator 2, the following components should be present:

2.1. An agency/program definition of timely manner

- A definition of "timely manner" is consistent with stipulations in the [Americans with Disabilities Act (ADA)](#) and [Section 504 of the Rehabilitation Act](#)

2.2. Strategic collaborations that are important to the timely provision of accessible materials and technologies

- University/university system leadership convenes appropriate personnel to establish and communicate an institutional definition of timely manner (e.g., ADA Coordinator, disability/accessibility services personnel, general counsel)
- Procurement departments at the system and campus levels communicate with vendors to ensure understanding of accessibility requirements in the bidding process, contracts, and purchase orders
- Faculty collaborate with campus or state accessibility specialists for training and resources on best practices for creating accessible course materials
- Disability/accessibility services personnel collaborate with university communications personnel to ensure that procedures for requesting accommodations, including accessible formats and assistive technology, are widely communicated
- Disability/accessibility services personnel collaborate with students to identify delays to receiving accessible materials and technologies, and then collaborate with appropriate departments and service providers to find solutions

2.3. Multiple means for timely delivery

- Examples of actions that can be taken to optimize timely provision:
  - Procuring the most accessible and high-quality digital materials and technologies that are available for purchase
  - Including timelines and/or roadmaps for providing accessible materials and technologies in purchase agreements
  - Informing students of required and recommended textbooks and supplemental materials at the time of course registration

- Purchasing institutional subscriptions to third party media conversion and captioning services
- Creating organizational accounts with services that provide accessible formats of copyrighted materials for eligible students, such as [Bookshare](#), [Learning Ally](#), and [AccessText](#)
- Coordinating with the State Instructional Materials Center or [American Printing House (APH)](#) for braille, large print, and tactile materials
- Identifying and correcting delays to timely manner when they happen

Quality Indicator 3: Written Guidelines

Statement: The institution **develops and implements written guidelines** on the provision and use of high-quality accessible materials and technologies and **disseminates them to all stakeholders**.

Intent: Guidelines, informed by institutional policies, document the roles and responsibilities for timely provision and use of high-quality accessible materials and technologies. Guidelines are communicated in multiple formats and broadly disseminated to ensure that all responsible parties can understand and apply them.

Critical Components for Quality Indicator 3

To effectively address Quality Indicator 3, the following components should be present:

3.1. Guidelines that specify laws and policies relevant to the provision and use of accessible materials and technologies, including assessment

- Relevant federal laws and policies that can be specified:
  - [Americans with Disabilities Act (ADA)](#) as related to Title II and the provision of auxiliary aids and services described in Section 504, regardless of federal funding provided to the institution.
  - [Section 504 of the Rehabilitation Act of 1973](#) as related to the provision of auxiliary aids and services in a timely manner to students with disabilities in higher education institutions that receive federal funding.
  - [Higher Education Opportunity Act](#) as related to [Universal Design for Learning (UDL)](#) and [Textbook Information](#).
  - [Section 508 of the Rehabilitation Act of 1973](#) as related to federal technology accessibility standards in the procurement of digital materials and technologies.
  - University system or institutional policies that can be specified

- o Digital accessibility policy (i.e., EIT/ICT accessibility)
- o Disability accommodations policy (i.e., processes for requesting accessible formats and assistive technology (AT))

3.2. Guidelines for procuring accessible digital materials and technologies for all students

- Inclusion of accessibility requirements in purchase agreements with curriculum developers and vendors
- Best practices for evaluating the accessibility of curricula and educational products

3.3. Guidelines for providing accessible formats of curriculum materials for students who require them

- Student procedures for requesting accessible formats (i.e., alternative formats) and AT from disability/accessibility services
- Procedures for disability/accessibility services personnel to follow in the provision of accessible formats (i.e., in compliance with section 121 of U.S. Copyright Act/Chafee Amendment)

3.4. Guidelines that delineate roles and responsibilities at all levels

- Roles and responsibilities should be identified for all areas related to the timely provision and use of accessible materials and technologies. Examples include:
    - o In the procurement of accessible digital materials and technologies, the responsibilities of the personnel assigned to evaluate for accessibility (e.g., request and validate Voluntary Product Accessibility Templates (VPATs)/Accessibility Conformance Reports (ACRs)), communicate accessibility requirements with vendors, and ensure that required accessibility language is included in purchase agreements
    - o In faculty selection of course materials (e.g., textbooks, articles, video, Open Educational Resources (OER)), the responsibilities of the faculty, department, bookstore, library, or others to ensure that materials will be accessible in a timely manner
    - o In faculty creation of digital content (e.g., documents, slide decks, video, podcasts, web pages) the responsibilities of the faculty, web accessibility specialists, third party vendors (e.g., captioning and transcription services), LMS administrator, or others to ensure that materials meet accessibility requirements

- In the provision of accommodations for students who require accessible formats and AT, the responsibilities of the student, disability/accessibility services personnel, and faculty
- In addition to providing guidelines, an institution may consider including responsibilities related to the timely provision of accessible materials and technologies within job descriptions

3.5. Guidelines that are made available in multiple formats and widely disseminated through varied means to reach all stakeholders

- Examples of formats for conveying guidelines
    - Print
    - Large print
    - Accessible digital text
    - Closed-captioned and audio described video
    - Audio with transcript
    - Braille
- Examples of varied means for disseminating guidelines to all stakeholders
    - Student orientation materials and course syllabi
    - Websites
    - Reference cards
    - Infographics
    - Pamphlets
    - Handouts
    - Email

Quality Indicator 4: Learning Opportunities and Technical Assistance

Statement: The institution provides or arranges for **comprehensive learning opportunities and technical assistance (TA)** that address all areas of the provision and use of high-quality accessible materials and technologies.

Intent: Comprehensive learning opportunities and technical assistance are ongoing, draw from multiple sources, and offered in different forms that benefit all stakeholders.

Critical Components for Quality Indicator 4

To effectively address Quality Indicator 4, the following components should be present:

4.1. Content that is targeted at the differentiated roles and responsibilities of all stakeholders

- In identifying content, the needs of all stakeholders are systematically addressed, including but not limited to
    - Students with and without disabilities who need to be aware of accommodations available and how to access them
    - Faculty and instructional designers who need to know how to select, create, and use accessible digital materials for teaching and learning
    - Deans and department chairs who need to allocate resources for ensuring the provision of accessible materials and technologies within colleges and schools of the university
    - EIT/ICT personnel who need to implement digital accessibility standards
    - Disability/accessibility services personnel who need to provide accessible formats and assistive technology (AT) for students who require them
    - Library personnel who need to know how to improve the accessibility of materials in databases and course reserves
    - Procurement personnel who need to know how to communicate accessibility requirements to vendors

4.2. Learning opportunities and TA that are designed and delivered using evidence-based practices

- Examples of evidence-based practices include those that
    - Are learning-embedded for students
    - Are job-embedded for personnel
    - Address learner variability, including the accessibility of the training and TA materials (e.g., using the [Universal Design for Learning](#) framework)
    - Build upon university system and institutional initiatives for improving teaching and learning with technology on campus and online
    - Are informed by data collection and use (see Quality Indicators 5 & 6)

4.3. Use of federally-, state-, and locally-funded sources of high-quality content, training, and TA

- Examples of state-level services
    - [State AT Program](#)
    - Rehabilitation Services
- Examples of national services
    - [National Center on Accessible Educational Materials for Learning (National AEM Center)](#)

- Job Accommodation Network (JAN)
- Association on Higher Education And Disability (AHEAD)
- AccessText
- WebAIM
- National Center for College Students with Disabilities (NCCSD)
- ADA National Network
- Bookshare
- Office for Civil Rights

Quality Indicator 5: Data Collection

Statement: The institution develops and implements a **secure, systematic data collection process** to monitor and evaluate the equitable, timely provision and use of high-quality accessible materials and technologies.

Intent: Data collection processes target the provision and use of high-quality accessible materials and technologies through both institutional procurement for all students and through disability/accessibility services for students with accommodations.

Critical Components for Quality Indicator 5

To effectively address Quality Indicator 5, the following components should be present:

5.1. Methods for collecting data on the procurement of accessible digital materials and learning technologies for use by all students

- Ongoing inventory of digital materials and technologies that comply with Section 508 of the Rehabilitation Act and the applicable version of the Web Content Accessibility Guidelines (WCAG) at level AA
- Ongoing inventory of digital materials and technologies that do not comply with Section 508 and the applicable version of the Web Content Accessibility Guidelines (WCAG) at level AA
- Ongoing record of communications with vendors regarding product accessibility

5.2. Methods for collecting satisfaction data from all students on the quality and effectiveness of course materials and technologies, including accessibility

- Anonymous post-course evaluation surveys include an item related to the usability and accessibility of course materials and technologies

5.3. Methods for securely collecting data on the extent to which students with disabilities receive and effectively use accessible formats of copyrighted materials, including assessments, in a timely manner

- Student privacy is maintained while keeping records of the timeliness and quality of the accessible formats and related assistive technology (AT) provided to students through the disability accommodations process
    - Tracking and recording the timely delivery of accessible formats for students who require them
    - Inspecting and recording the quality of accessible formats received by those students
    - Observing and recording the effective use of accessible formats by those students
    - Surveying and conversing with students on their experience with receiving and using accessible formats of materials

5.4. Methods for securely collecting data to ensure that students who are provided an accessible format accommodation proportionally represent the demographics of all students enrolled in the institution

- Number of students with an accessible (or alternative) format accommodation
- Disability categories of those students
- Demographic categories of those students

Quality Indicator 6: Data Use

Statement: The institution **securely uses data to guide changes that support continuous improvement** in all areas of the systemic provision and use of high-quality accessible materials and technologies.

Intent: While protecting student privacy, data are systematically analyzed to measure effectiveness of all areas of the current system and are used to inform actions needed to improve practice, program planning, and resource allocation.

Critical Components for Quality Indicator 6

To effectively address Quality Indicator 6, the following components should be present:

6.1. Analysis of procurement data (Critical Component 5.1) to monitor practices for ensuring digital material and technology accessibility in contracts, purchase agreements, and in communications with vendors

- Data are used to increase and sustain the proportion and range of market-available accessible digital materials and technologies procured by the institution.

6.2. Analysis of course satisfaction data (Critical Component 5.2) to monitor the usability and accessibility of course materials and technologies

- Data are used to identify and correct delays in timely manner and/or technical issues with the quality of accessible formats provided to students.

6.3. Analysis of disability/accessibility services data (Critical Component 5.3) to monitor the quality and timely provision of accessible formats of copyrighted materials for students who require them

- Data are used to increase and sustain the consistency with which students who require them receive and effectively use materials in high-quality accessible formats.

6.4. Analysis of disability/accessibility services data (Critical Component 5.4) to monitor the proportional representation of students receiving accessible formats

- Data are used to determine the extent to which the institution is equitably serving students from all demographics and disability categories who may need accessible formats of copyrighted materials.

6.5. A means for the institution to consider the potential impact of barriers for students with disabilities when analyzing data submitted to the Integrated Postsecondary Education Data System

- For data indicating low retention and graduation rates, the institution investigates whether the formats of curriculum materials or the design of educational technologies used for teaching, learning, and assessment are presenting functional barriers, such as physical, sensory, or perceptual, for some students.

6.6. A systematic approach that supports effective data analysis and use

- Parts of a systematic approach include:
  - Training for personnel conducting analyses to ensure accuracy and consistency
  - Alignment of analyses with purposes of the quantitative and qualitative data collected
  - Methods that protect the identity of students
  - Timelines for implementation of data driven decisions
  - Identification of target audiences with whom aggregated summaries of the data analysis will be shared

6.7. A team consisting of personnel with the combined expertise and authority to synthesize the data, make recommendations, and implement necessary changes

- Examples of personnel for such a team include but are not limited to
  - ADA and Section 504 Coordinator
  - Disability/accessibility services personnel
  - Diversity Officer

6.8. Dissemination of aggregated summaries of data analysis results to all stakeholders, in user-friendly formats

Quality Indicator 7: Resource Allocation

Statement: The institution **allocates resources sufficient to ensure the delivery and sustainability of quality services** to students with disabilities who need high-quality accessible materials and technologies.

Intent: Sufficient fiscal, human, and infrastructure resources are committed to ensure that the needs of students are effectively met.

Critical Components for Quality Indicator 7

To effectively address Quality Indicator 7, the following components should be present:

7.1. Resources that are provided for fiscal, human, and infrastructure needs

- Fiscal (e.g., funds for third party vendor subscriptions that can create system- or institution-wide efficiencies in media conversion, closed captioning, audio description, and transcripts)
- Human (e.g., training and technical assistance resources required to fulfill roles and responsibilities of personnel)
- Infrastructure (e.g., coordination across technology systems to ensure interoperability with students' assistive technologies)

7.2. Resources that are used to address the needs of all stakeholders, including all students being served by the institution