

AEM Quality Indicators with Critical Components for Early Childhood

Preschool Aged Children Served Under IDEA Part B

V.1.0

By National AEM Center at CAST

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Preface

As the Early Childhood Technical Assistance (ECTA) Center states, children with disabilities have the right to participate in everyday activities with their typically developing peers. In inclusive early childhood programs and settings, social and learning activities are designed for the participation of all children. Objects, tools, and materials that are selected in the design of inclusive activities include options that facilitate engagement through multiple sensory, physical, and perceptual means.

While early childhood providers and families prioritize activities that optimize interactivity with peers and the natural environment, the National AEM Center recognizes that print and digital materials and technologies are commonly present in early learning settings, including the home and community. If and when they are determined to be appropriate, interactive materials and technologies need to be accessible if children with disabilities are to benefit from inclusive settings. Examples of accessible materials and technologies in early learning settings can include:

- Tactile books that include a combination of print and braille
- Video that includes captioning of sounds and audio description of visual elements
- Mobile apps that are compatible with a child’s assistive technology (AT)

The provision and use of accessible materials and technologies for children with disabilities in early childhood programs is effectively achieved through a systemic

approach. Under state leadership, a cross-sector team of stakeholders work together to ensure that federal and state requirements and expectations for the provision of services and supports for children with disabilities include the provision and use of accessible materials and technologies. The National AEM Center's Quality Indicators describe the essential elements of such a system, including coordination, compliance, guidelines, professional development, data procedures, and resources. The indicators can be used by decision makers to develop new procurement systems or to self-evaluate an existing system that may not yet include best practices for accessibility.

Version 1.0 of the Quality Indicators with Critical Components for the Provision of Accessible Materials and Technologies in Early Childhood Programs is specific to programs that serve children ages three-five years receiving special education and related services under Part B of the Individuals with Disabilities Education Act (IDEA Part B). The National AEM Center expects that this initial version will guide the necessary coordination between the state and local level programs, particularly those within LEAs. We anticipate that subsequent versions will extend Critical Components to infants and toddlers under Part C.

Quality Indicator 1: A Coordinated System

Statement: The **state has a coordinated system** for the provision of high-quality accessible materials and technologies for preschool aged children receiving special education and related services under IDEA Part B.

Intent: Access for children with disabilities is built into the design of inclusive social and learning activities, including those that have print or text-based material, digital material, and technology. A coordinated system for the provision of such accessible materials and technologies is created and sustained by a state level cross-sector leadership team in collaboration with local programs and families.

Critical Components for Quality Indicator 1

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

1.1. Strategic collaborations for creating and sustaining a coordinated system for providing accessible materials and technologies

- Strategic collaborations can be achieved by a state led cross-sector leadership team with members from relevant state and local agencies, departments, and programs. Examples include:
 - [State director and coordinators of special education](#)

- Early Intervention/Early Childhood Special Education personnel
- [Section 619 Coordinator](#)
- [Early Childhood Technical Assistance \(ECTA\) State Contact](#)
- [Office of Special Education Programs \(OSEP\) State Lead, IDEA Part B and Part C](#)
- [State educational technology/digital learning personnel](#)
- State instructional materials review personnel (states with review processes are listed on the [K12 Instructional Materials Review Dashboard](#))
- Local special education administrators
- [Educational service agencies \(ESAs\)](#) or regional/community service centers
- [State Assistive Technology \(AT\) Program](#)
- State Instructional Materials Center (IMC) (refer to State AT Program)
- [State AEM Contact](#)
- [NIMAC State Coordinator](#)
- State services for blind and visually impaired children
- State services for deaf and hard-of-hearing children
- Families of children who need accessible materials and technologies, such as through [Parent Training & Information Centers/Community Parent Resource Centers \(PTIs/CPRCs\)](#)
- The cross-sector team is connected to any other state or local projects and initiatives related to inclusive early childhood programs, including any strategic inclusion plan.

1.2. A means for ensuring that digital materials and technologies purchased or created for use by all children 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](#).
- Early childhood personnel who create digital materials for use in inclusive social and learning activities (e.g., videos and digital stories) use the [accessibility practices afforded by common software tools](#), such as web authoring software, Google Suite, iWork, Microsoft Office, and YouTube.

1.3. A means for ensuring that accessible formats of print and text-based materials are provided for children who need them, with appropriate copyright protection

- Some children with disabilities have difficulty using print and text-based materials because these formats present physical, sensory, or perceptual barriers for them. Under [criteria set by the National Library Service \(NLS\)](#), eligible children can receive accessible formats of materials under copyright (e.g., braille, large print, digital text, or audio formats of a storybook). Additionally, the IDEA created the [NIMAC](#), which facilitates acquisition of accessible formats for eligible children who also receive special education services. This combination of copyright and special education law results in sources of accessible materials based on eligibility:
 - Accessible formats sourced from files obtained through the NIMAC for children who meet the NLS definition of eligible person and are also served under IDEA
 - Accessible formats acquired from restricted libraries such as [Bookshare](#), [Louis Database](#), and [Learning Ally](#) for children who meet the eligibility requirements of the specific library
 - Accessible formats acquired from the publisher/manufacturer for an individual child who meets the NLS definition of eligible person
 - Accessible formats purchased from the publisher/manufacturer for any child
 - Accessible formats curated from copyright-free sources, such as open libraries on the internet, for any child

Quality Indicator 2: Provision in a Timely Manner

Statement: High-quality accessible materials and technologies needed for the full participation of preschool aged children receiving special education and related services under IDEA Part B are acquired and provided in a **timely manner**.

Intent: In general, “timely manner” means children who require accessible materials and technologies receive them at the same time that materials and technologies are distributed to all children. For example, if a child needs a braille version of a book to participate in a reading activity, that accessible format is provided at the same time other children receive their books. Attention is given to identify and address factors that could delay timely delivery.

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

- [IDEA requires that every state have a definition of timely manner](#). States and LEAs coordinate with early childhood programs to ensure that timely manner is met.

2.2. Strategic collaborations for timely delivery of accessible materials and technologies

- The cross-sector leadership team described in Critical Component 1.1 facilitates strategic collaborations for ensuring timely manner. Examples include:
 - State special education leadership personnel communicate the state's definition of timely manner to LEAs and the early childhood programs within them, as well as other agencies and programs that provide IEP services and least restrictive environment for children with disabilities (e.g., Head Start and community partners).
 - Part C to Part B transition services personnel consult with families in the consideration of accessible materials and technologies in a child's IEP. When it is determined that a child needs accessible materials and technologies as part of their education program, a plan for timely provision is made.
 - Local assistive technology and educational technology personnel collaborate to ensure that the most accessible versions of digital materials and learning technologies are selected for use by all children, including children with disabilities.
 - Local programs coordinate with accessible media producers (AMPs), including [Bookshare](#) and the State Instructional Materials Center (IMC), to ensure timely delivery of accessible formats for children who need them.

2.3. Multiple means for timely delivery

- Examples of actions that can be taken at the State and local level to optimize timely delivery:
 - Proactive planning for inclusive learning and social activities includes procuring or creating accessible materials and technologies that may be needed by children with disabilities

- Procuring the most high-quality and accessible digital materials and technologies that are available for purchase
- Creating organizational accounts with AMPs, such as Bookshare and [Learning Ally](#)
- Identifying and correcting delays in timely manner when they happen

Quality Indicator 3: Written Guidelines

Statement: The state develops and implements written guidelines on the provision and use of high-quality accessible materials and technologies for preschool aged children receiving special education and related services under IDEA Part B and **provides them to all stakeholders.**

Intent: Guidelines, informed by federal, state, and local policy, 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, policies, and plans relevant to the provision and use of accessible materials and technologies, including assessment, in early childhood programs

- Relevant federal laws and policies that can be referenced in state and local guidelines related to the provision and use of accessible materials and technologies for preschoolers served under Part B
 - [IDEA](#) as related to the timely provision of accessible materials and technologies
 - [Every Student Succeeds Act \(ESSA\)](#) as related to coordination between early childhood programs and K-12 schools, including use of the Early Learning Guidelines
 - [Section 504 of the Rehabilitation Act of 1973](#) as related to providing preschool children with disabilities equal access to the program, with reasonable accommodations and modifications
 - [Section 508 of the Rehabilitation Act of 1973](#) as related to federal technology accessibility standards in the procurement of digital materials and technologies
- Relevant state guidelines, standards, and plans

- [Guidance provided in a state IEP form](#) that includes considerations for Accessible Educational Materials (AEM)/Accessible Instructional Materials (AIM) and/or assistive technology (AT)
- [State Performance Plan](#) as related to the role of accessible materials and technologies in supporting positive outcomes, such as in facilitating least restrictive environment; preparing children with disabilities for transition to K-12; and participation in state assessments
- [State ESSA plan](#) and [state early learning guidelines](#) related to inclusive practices in early childhood programs
- State and local education technology plan as related to ensuring coordination of technology across pre-K – 12, including digital accessibility and access to AT for children with disabilities in early childhood programs

3.2. Guidelines for procuring accessible digital materials and technologies for all children in early childhood programs

- 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 decision-making processes for providing accessible formats of curriculum materials for children who need them

- As part of an evaluation process, parents or caregivers and service providers follow a series of actions:
 - [Consider a child’s need for accessible formats](#).
 - [Select the accessible formats needed by the child](#), such as braille, large print, audio, and digital text.
 - [Identify the sources of those accessible formats](#), including the State Instructional Materials (IMC), [Bookshare](#), [Louis Database](#), and [Learning Ally](#).
 - [Provide the supports needed to use the accessible formats](#), including AT and training for the child, family, and personnel.
 - Protect copyright when providing accessible formats of copyrighted print and digital materials.

3.4. Guidelines that delineate roles and responsibilities of all stakeholders

- Roles and responsibilities should be identified for all areas related to the timely provision of accessible materials and technologies in early childhood programs. Examples include:
 - In the decision-making process of a child's need for accessible materials and technologies, the responsibilities of each team member, including parents and caregivers and outside service providers.
 - In the acquisition of accessible formats for children who need them, the responsibilities of the personnel who will coordinate with accessible media producers such as the state IMC, Bookshare, Louis Database, and Learning Ally.
 - In the training of personnel, families, and children on the use of accessible materials and technologies, the responsibilities of qualified training providers. Guidelines for determining appropriate settings for trainings should also be provided.
 - In the procurement of accessible materials and technologies at the state and local levels, the responsibilities of the personnel assigned to evaluate materials and technologies for accessibility, communicate with publishers and vendors, and ensure that required accessibility language is included in purchase agreements.
- In addition to providing guidelines, an agency 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 personnel, families, and the community:
 - State and district websites
 - State and district education technology plans
 - Reference cards

- Infographics
- Pamphlets
- Handouts
- Email

Quality Indicator 4: Learning Opportunities and Technical Assistance

Statement: The state and local programs provide or arrange for **comprehensive learning opportunities and technical assistance (TA)** that address all areas of the provision and use of high-quality accessible materials and technologies for preschool aged children receiving special education and related services under IDEA Part B.

Intent: Comprehensive learning opportunities and TA are ongoing, draw from multiple sources, and are offered in different forms that benefit children and their families, personnel, and the community.

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:
 - Children with disabilities and their families who need to know the process for receiving accessible materials and how to use them with related assistive technology (AT) at school, home, and in the community
 - General and special education teachers who need to collaborate on supporting children with disabilities in using accessible materials and technologies for full participation, independence, and progress in natural, inclusive, and routines-based environments
 - Paraprofessionals who need to know how to provide direct support to children who use accessible materials with related AT
 - Related services personnel (e.g., OTs, PTs, SLPs) who need to know how to evaluate and monitor the use of accessible materials and AT by children who need them

- Transition coordinators who need to ensure that children who use accessible materials and technologies experience continuity of services as they transition to new settings
- Educational technology/digital learning and AT personnel who need to collaborate on ensuring a robust technology infrastructure that supports interoperability with AT
- Procurement/purchasing decision makers who need to know how to communicate accessibility requirements to vendors, both orally and in written contracts and purchase agreements

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

- Examples of evidence-based practices include those that
 - Are job-embedded for personnel.
 - Are learning-, home-, and community-embedded for children and their families.
 - Address learner variability, including the accessibility of the training and TA materials (e.g., using the [Universal Design for Learning](#) framework).
 - Build upon state and local initiatives for improving teaching and learning with technology in multiple settings (e.g., in-person, hybrid, or remote).
 - Engage families as essential partners, including ways that individualize supports for families of children who need accessible materials and technologies.
 - 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 agencies, programs, and centers that offer services related to accessible materials and technologies and/or inclusive programming for children with disabilities:
 - State- and regional level services
 - [State AT Program](#)
 - Rehabilitation services
 - [Educational service agencies \(ESAs\)](#) or regional/community service centers
 - [Parent Training & Information Centers/Community Parent Resource Centers \(PTIs/CPRCs\)](#)
 - National services

- [National Center on Accessible Educational Materials for Learning \(AEM Center\)](#)
- [Early Childhood Technical Assistance \(ECTA\) Center](#)
- [Center on Inclusive Technology & Education Systems \(CITES\)](#)
- [Center on Technology and Disability](#)
- [The IRIS Center](#)
- [Bookshare](#)
- [National Instructional Materials Access Center \(NIMAC\)](#)
- [Center for Parent Information & Resources \(CPIR\)](#)

Quality Indicator 5: Data Collection

Statement: The state and local programs use a **secure, systematic data collection process** to monitor and evaluate the equitable, timely provision and use of high-quality accessible materials and technologies for preschool aged children receiving special education and related services under IDEA Part B.

Intent: While protecting children’s privacy, data collection processes target all areas of the provision and use of accessible materials and technologies, including the risk of disproportionality in the disabilities and demographics of children being served. Any state quality assurance process that addresses the provision of services and supports for children with disabilities in inclusive settings includes data collection activities related to the provision and use of accessible materials and technologies.

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 children

- Ongoing inventory of digital materials and learning 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 learning 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 securely collecting data on the extent to which children who need them receive high-quality accessible formats of materials, including assessments, in a timely manner

- Tracking and recording the timely delivery of accessible materials for children with disabilities who need them
- Inspecting and recording the quality of accessible materials received by those children

5.3. Methods for securely collecting data on the extent to which children who need them effectively use accessible formats of materials

- Observing and recording the use of accessible formats of materials in all settings where they are needed (e.g., learning, play, home, and community)
- Conversing with children who use accessible formats about the quality of their experiences
- Surveying families about the quality of their children's experience with using accessible formats of materials and related assistive technology (AT)

5.4. Methods for securely collecting data on the proportion of children across disability and demographic categories that are receiving accessible formats of materials, and that an appropriate range of formats are being provided to those children

- Number of children who have [Accessible Educational Materials \(AEM\)/Accessible Instructional Materials \(AIM\) included in the IEP](#) or 504 Plan
- Disability categories of those children
- Demographic categories of those children

Quality Indicator 6: Data Use

Statement: The state and local programs have a plan for the **secure use of data to guide changes for continuous improvement** in all areas of the systemic provision and use of high-quality accessible materials and technologies for preschool aged children receiving special education and related services under IDEA Part B.

Intent: While protecting children's privacy, data are systematically analyzed to measure effectiveness of all areas of the 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 the proportion and range of market-available accessible digital materials and technologies procured by the state and local programs.

6.2. Analysis of timely manner and quality data (Critical Component 5.2) to monitor the efficiency with which high-quality accessible formats of materials are provided to children who need them

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

6.3. Analysis of use data (Critical Component 5.3) to monitor the effectiveness with which children who need accessible formats use the materials provided

- Data are used to identify and correct problems that children may experience when using accessible formats of materials, such as environmental issues or lack of training to use the related assistive technology (AT).

6.4. Analysis of demographic and disability category data (Critical Component 5.4) to monitor the representation of children receiving accessible formats of materials, and the ranges of those formats.

- Data are used to prevent disproportionality of children identified as needing accessible formats of materials, and to ensure that an appropriate range of types and sources of accessible formats are being acquired.

6.5. A means for local programs to consider a child's need for accessible materials and technologies when analyzing IDEA Section 618 data.

- Examples of considerations when analyzing [Section 618](#) data include:

- For a child who is not making expected progress in language and communication, emergent literacy reading, emergent literacy writing, or mathematics, a team considers whether the formats of the materials or the design of the learning tools, including those used for assessment, are presenting functional barriers, such as physical, sensory, or perceptual.
- For a child presenting behavioral challenges, a team considers whether functional barriers to materials used for social and learning activities are interfering with access and, thereby, interfering with efforts to promote Positive Behavioral Interventions and Supports (PBIS).

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 state and local personnel with the combined expertise and authority to synthesize the data, make recommendations, and implement necessary changes

- Examples of relevant personnel from both state and local programs include:
 - Administrators who can convene the appropriate personnel and allocate necessary resources
 - General and special education teachers who can interpret the data on behalf of instructional staff
 - Related services personnel who can interpret the data on behalf of therapists
 - Data managers who can address the alignment and integration of the data with other data collected by the state and programs
 - Multicultural/multilingual personnel who can interpret the data from the perspective of the risks of disproportionality
 - Educational technology/digital learning and AT personnel who can interpret the data from the perspective of the need for a robust

infrastructure for accessibility and the goal of an inclusive technology ecosystem

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

- Examples of targeted audiences include:
 - Families, who need to be assured that all measures are being taken for timely delivery of consistently high-quality accessible materials and technologies for their children
 - State Instructional Materials Center (IMC), which can use the data to improve its conversion and delivery services
 - [State AT Program](#), which can use the data to inform its training, technical assistance, and other services for state agencies and local programs
 - All program personnel with roles and responsibilities in the provision and use of accessible materials and technologies, for whom the data will inform continuous improvement in practice

Quality Indicator 7: Resource Allocation

Statement: The state and local programs allocate resources sufficient to ensure the delivery and sustainability of quality services to preschool aged children under IDEA Part B who need accessible materials and technologies, as well as their families.

Intent: Sufficient fiscal, human, and infrastructure resources are committed to ensure that the needs of children and their families 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

- Examples include:
 - Coordinating and braiding of funds as permitted (e.g., IDEA and ESSA funds)
 - Training and technical assistance informed by local program needs (e.g., self-assessments completed by personnel and families)

- Supporting an inclusive technology infrastructure at the local level (e.g., the purchase and maintenance of digital materials and technologies that are interoperable with assistive technology)

7.2. Resources that are used to address the needs of all stakeholders, including all children being served and their families