

DIGITAL INSTRUCTIONAL MATERIALS TOOLKIT

2024



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DEPARTMENT OF
EDUCATION

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OREGON ACCESSIBLE EDUCATIONAL MATERIALS (AEM) COHORT

OREGON DEPARTMENT OF EDUCATION OFFICES AND STAFF

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INTRODUCTION

In 2020 and 2021, Congress authorized three rounds of nearly \$190.5 billion in funding to states through the Elementary and Secondary School Emergency Relief (ESSER) Fund to support public education recovery in response to the COVID-19 pandemic. ODE reserved approximately \$112 million to support 12 equity-driven, statewide initiatives developed in response to priorities identified by Oregonians. One of these priorities was to address the needs of districts adopting digital instructional materials during the transition to Comprehensive Distance Learning. Efforts to meet this need ultimately resulted in the development of the Digital Instructional Materials Toolkit to support districts and schools when reviewing and adopting instructional materials that include digital components. Research, evidence, and experience have proven that the adoption and use of high-quality instructional materials can yield significant improvements in student learning outcomes that are equally or more effective than other costly interventions.

The Digital Instructional Materials Toolkit project is a supplemental resource to accompany a district's standard [instructional materials adoption process](#) and is tailored for educators and school districts who are navigating the nuanced challenge of adopting high-quality digital instructional materials to support student learning. This toolkit encompasses guidance and advice on critical topics such as accessibility, student data privacy, adaptability, cultural responsiveness in digital materials, centering linguistic strengths through technology, interoperability, and modularity and aims to empower school leaders in a focused curriculum adoption and implementation process that includes digital materials.

How to use this Toolkit

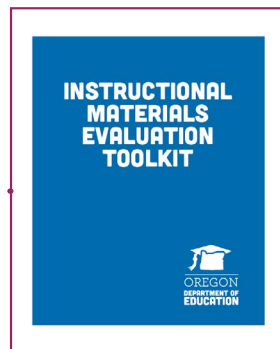
This toolkit is designed as a comprehensive set of best practices to consider when adopting digital materials and is meant to be an additional, supplemental set of tools to consider alongside the [Instructional Materials Toolkit](#), which can be found on the [Oregon Department of Education's Instructional Materials website](#). The information included in this toolkit is largely centered around recommendations and best practices. Regulations and requirements are addressed in the Accessibility and Student Data Privacy sections, but this toolkit does not include any new requirements or regulations.

Schools and districts are encouraged to use resources and tools from this toolkit that support their needs for digital instructional material adoption and skip to sections of needed support, rather than reading this document from start to finish. This toolkit does not replace the standard instructional materials adoption process or criteria established by the State Board of Education.

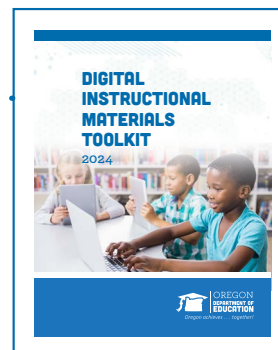
STATE BOARD OF EDUCATION

INSTRUCTIONAL MATERIALS ADOPTION

REQUIRED for all instructional materials, including digital and/or multi subject digital



←
SUPPLEMENTAL AND HIGHLY RECOMMENDED for digital materials, unless otherwise noted as required



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Listed below is a short description of each section found within the Toolkit:

Accessibility



Accessible instructional materials allow students with disabilities the opportunity to acquire the same information, engage in the same interactions, and enjoy

the same learning opportunities as students without disabilities, in an equally effective and integrated manner. In addition to federal law, the State of Oregon requires that vendors provide an accessibility conformance report (ACR) that “must be prepared by an independent third party and be based on an audit testing a random sampling of each different type of electronic component as outlined in each circular of information” (Oregon Administrative Rule (OAR) 581-011-0087).

Vendors should provide this ACR at the start of the adoption process.

Adaptability



Adaptive learning generally refers to a software platform’s ability to assess a student’s knowledge and/or skills in real time and adjust the learning on

the basis of a student’s strengths and needs. It is important to note that the definition of “adaptive” is rapidly evolving due to the integration of artificial intelligence tools within digital instructional environments. The U.S. Office of Technology observes that the term “adaptive” is evolving and becoming more broad in nature and that “adaptive” should not always be a synonym for individualized learning because people are social learners. This would imply that adaptive technology is evolving to include other students in an immersive adaptive environment.

Cultural Responsiveness



Culturally responsive materials encourage student engagement - especially from historically marginalized groups whose perspectives have often

been absent or misrepresented in digital instructional materials. Broadly speaking, culturally responsive instructional materials are important because they reflect and affirm the diverse backgrounds, experiences, and needs of the students who will be using them.

Interoperability



Interoperability refers simply to a student’s ability to access different educational technologies easily and efficiently. With respect to the student experience, it means

that they are not required to have multiple logins and passwords to access materials from different courses and subjects. Ideally, if a digital instructional materials platform has a grading component, it should integrate seamlessly with the district’s grade reporting system.

Linguistic Strengths



Centering linguistic strengths means discovering and building on students’ skills while embedding procedural, instructional, and verbal scaffolds alongside

linguistic supports such as word banks, graphic organizers, visuals, and sentence frames to ensure that students can develop linguistically and academically. Embedded translations and scaffolding tools should be a part of an integrated and intentional pedagogy that incorporates appropriate scaffolding to meet the needs of the variety of learners found in Oregon schools.

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Modularity



Modularity refers to the ability of a teacher to tailor teaching and learning approaches to meet the individual needs of each student. This means the ability to easily assign individual materials to individual/groups of students and to move materials within a platform's scope and sequence in order to best meet the needs of students and desired learning outcomes.

Student Data Privacy



Districts are bound by both federal and state law to protect the personal information of students from being collected, used, or shared without consent. Vendors should be asked if they have signed the Student Privacy Pledge and whether or not any other Oregon districts have a National Data Privacy Agreement (NPDA) with the vendor.

Features of the Toolkit

Within each section, you can find the following features to support in the adoption process:

FAQ'S: The FAQ's portion contains some frequently asked questions and answers related to each section topic.

RUBRICS: Each section contains a rubric table which may be used and/or adapted to suit the needs of individual schools and districts and is included as a sample framework to use in addition to the standard adoption process when evaluating digital instructional materials that are being considered for adoption.

KEY TERMS: At the end of each section, you can find key terms related to the section topic.

RESOURCES: Specific resources are linked at the end of each section that are specific to the section topic.

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ACCESSIBILITY IN DIGITAL INSTRUCTIONAL MATERIALS



At the beginning of the Adoption Process

Defining Accessibility

Accessible instructional materials allow students with disabilities the opportunity to acquire the same information, engage in the same interactions, and enjoy the same learning opportunities as students without disabilities, in an equally effective and integrated manner. Accessible digital instructional materials are designed to “enable and encourage self-sufficiency, participation, and collaboration.”¹ As digital instructional materials continue to proliferate, so do the needs to meet accessibility standards using these new tools. Accessible digital instructional materials allow all students to develop their skills and to accentuate their strengths as learners.

Understanding Key National Policies

Accessibility is a key component of the [Americans with Disabilities Act \(ADA\)](#). Instructional materials standards are also a key component of the [Individuals with Disabilities Education Act \(IDEA\)](#), which includes the [National Instructional Materials Accessibility Standard \(NIMAS\)](#). For more information on these and other policies related to instructional materials and what they mean for schools and districts, see the table below.

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1 “Advancing Digital Equity for All: Community-Based Recommendations for Developing Effective Digital Equity Plans to Close the Digital Divide and Enable Technology-Empowered Learning.” n.d. https://tech.ed.gov/files/2022/09/DEER-Resource-Guide_FINAL.pdf.

Photo courtesy of Portland Public Schools

Policy	Description	What this means for schools and districts
Americans with Disabilities Act (ADA)	The ADA is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public. The purpose of the law is to make sure that people with disabilities have the same rights and opportunities as everyone else.	In the context of digital instructional materials, the Americans with Disabilities Act (ADA) requires that schools and other organizations provide access to online course materials and other educational resources in a way that is accessible to individuals with disabilities. This means that materials should be designed in a way that allows individuals with visual, auditory, physical, or cognitive impairments to use them effectively. This can include providing alternative formats for materials, such as audio or braille versions, or using assistive technology to make them more accessible.
The National Instructional Materials Accessibility Standard (NIMAS)	Nimas is a specification for the production of curriculum materials that are accessible to students with disabilities. It is part of the Individuals with Disabilities Education Act (IDEA), a federal law that ensures that students with disabilities receive a free and appropriate public education.	NIMAS is intended to help schools and educational agencies provide accessible versions of these materials to students with disabilities in a timely and cost-effective manner.
Web Content Accessibility Guidelines (WCAG) 2.0 AA	The WCAG 2.0 AA conformance level is used in most accessibility rules and regulations around the world, including the ADA. To meet WCAG 2.0 Level AA conformance, the website is usable and understandable for the majority of people with or without disabilities. ²	For schools and districts, WCAG’s guidelines and principles should be used when reviewing digital instructional materials. These guidelines are centered around the P.O.U.R. principles: <ul style="list-style-type: none"> ▪ Perceivable ▪ Operable ▪ Understandable ▪ Robust

Understanding Oregon Policy

In addition to national policies on Accessibility, it is important to note a recent addition to Oregon Administrative Regulations.

On December 7th, 2023, the Oregon State Board of Education approved a revision to [Oregon Administrative Rule \(OAR\) 581-011-0087](#) which requires an accessibility conformance report (ACR) for digital instructional materials submitted for evaluation and adoption in Oregon:

“A publisher that offers digital, electronic, or web-based materials must provide an accessibility conformance report for each electronic component that documents adherence to the Web Content Accessibility Guidelines (WCAG) identified in the circular of information and technical standards required by the Federal Rehabilitation Act, Section 508. The report must be prepared by an independent third party and be based on an audit testing a random sampling of each different type of electronic component as outlined in each circular of information.”

² [What are the levels of WCAG?](#) from Accessible Metrics

INFORMATION FOR VENDORS

This requirement will be implemented for future evaluations and adoptions beginning in 2024. To allow ODE to remain responsive to evolving digital accessibility standards, information about the ACR requirement will be provided in the annual Circular of Information.

For publishers:

- When testing the accessibility of the materials, the auditor must take the following steps:
- Use automated web accessibility evaluation tools to analyze the selected pages and note any problems indicated by the tools.
- Manually check pages to determine that form labels and alternative text on images and graphs is appropriate.
- Manually check pages with dynamic content, forms, or other applications.
- Determine whether page content and controls can be accessed, operated, and reset when necessary, using only a keyboard.
- Examine pages with graphical user interface (GUI) browser (e.g., Internet Explorer, Edge, Firefox, Chrome) while listening to the page with screen-reader software.
- Employ and include documentation of the experience of real users with disabilities for manual testing.
- Test a random sample of each different type of electronic component.

The final report provided to ODE must include, at a minimum, the audit results from the following pages:

- The home page people use to enter the site.
- One page with at least one table or form (if applicable).
- One page with at least one informational image (e.g., a diagram, map, or graph).
- One page from each component of the product.
- One page with interactive content.

Publishers can determine the total number of pages included in the testing. A publisher that provides access to materials to students with disabilities through an alternate format must include a link to that material on the entrance page of the main product. Failure to provide a report with a cover sheet and/or material that is found to not meet any of the required accessibility standards will result in that product's removal from the adopted list and the publisher's contract may be presented to the SBOE for termination. If the contract has not yet been terminated, the product will be returned to the adopted list when the publisher certifies that the product meets the required accessibility standards and submits an updated cover sheet.

Identifying Staff and Collaborators

Since staffing and capacity can vary at school districts, the recommendations in this section may also vary depending on staff capacity. When forming a curriculum adoption team, it is essential to ask for participation from at least one member of the special education department who has experience in accessibility. Being aware of accessibility challenges and student needs is better accomplished at the beginning of the process, and having staff with accessibility expertise on the adoption team from the beginning will support a successful adoption process. Retrofitting materials after they are already produced is a difficult task at best, and in many cases is simply not possible.

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Identifying Students

Knowing the accessibility needs of students is also helpful in the adoption process. Consider not only the needs of students currently enrolled, but also the needs of all students, as these materials must be ready for any new students enrolling in the future. With respect to digital instructional materials, “fully accessible” means that it should not be more difficult for students with disabilities to access materials. For example:

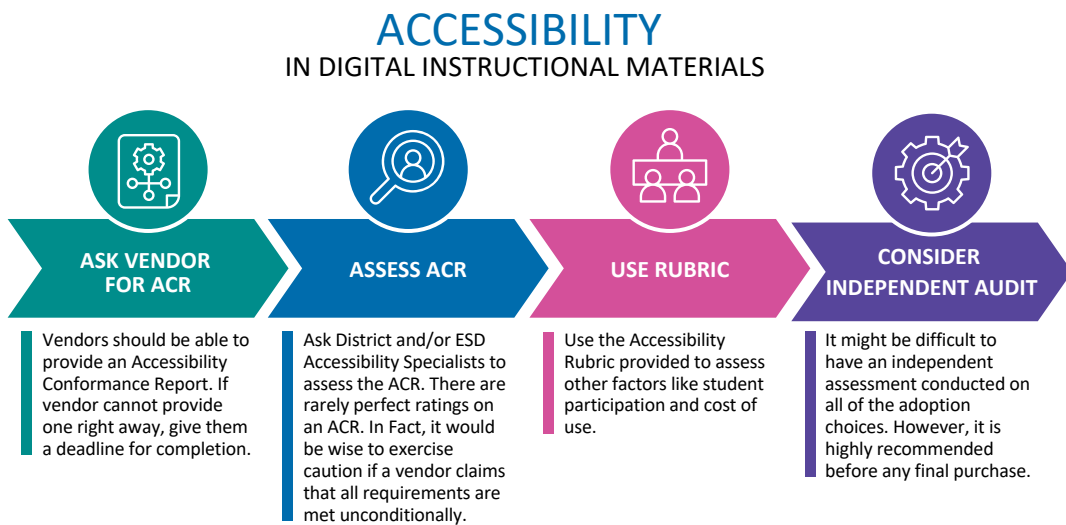
- Students with vision or hearing disabilities can easily use tools such as closed captions, audio descriptions, and adjustable text sizes to access content.
- Students with dyslexia reads materials with a font and color contrast format that supports their learning by relieving visual stress.
- Students can view videos with closed captioning in order to accommodate different learning modalities.
- Students with required accommodations can easily learn and participate with accessibility tools like text to speech.

During the Adoption Process

Evaluating the Accessibility of Digital Instructional Materials

The two documents listed below are helpful for evaluating digital instructional materials to ensure they meet eligibility requirements:

- The **Voluntary Product Accessibility Template (VPAT)** is a standard template that comes pre-populated with some of the more common accessibility standards. This process helps to ensure that federal and state policies and best practices (e.g. Section 508 of the Rehabilitation Act of 1973 and WCAG) are met for all digital instructional materials being used.
- An **Accessibility Conformance Report (ACR)** is simply a completed VPAT. It provides information regarding the accessibility of the materials. It often includes components such as Scope, Evaluation Methodology, Accessibility Standards, Findings, Remediation Recommendations, Conformance Level based on WCAG criteria, and an overall accessibility statement related to the digital instructional materials.



The ACR is organized in accordance with Web Content Accessibility Guidelines (WCAG) which are centered in the [“POUR” principles](#).

- **P**erceivable - Information and user interface components must be presentable to users in ways they can perceive.
- **O**perable - User interface components and navigation must be operable.
- **U**nderstandable - Information and the operation of the user interface must be understandable.
- **R**obust - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.

The ACR includes a three-column table which outlines: the success criteria (i.e. the WCAG principles); the conformance level with each of the success criteria (supports, supports with exceptions, does not support, not applicable, and not evaluated); and an explanation justifying the conformance level provided with the criteria. Here is an example of an [Accessibility Conformance Report \(ACR\)](#) from Adobe.

Carefully review the ACR to determine how accessible the digital instructional materials are and also any points of entry for discussions with vendors. When an ACR is submitted by a vendor, assess accuracy to ensure that the information provided is correct. Information on ensuring that the provided information is accurate can be found on [The Accessibility Oz website](#), which details steps for this process and questions for consideration. Such steps include looking for items like incomplete cells, using non-standard language, using one ACR for multiple types of materials, having a test that is over one year old, having missing or incomplete contact information, and using only automated testing methods.

Quick Look-Fors

- Are any of the success criteria marked as “does not support”? *If so, this is an indication that the materials do not meet federal requirements and standards for accessibility. For criteria marked “does not support,” ask the vendor for clarification.*
- Are any of the sections of the ACR Table blank? *If so, this is an indication that the VPAT was not properly completed and that materials might not meet federal requirements and standards for accessibility. Ask the vendor directly about any blank sections.*
- Is the VPAT more than 12 months old? *If so, this is an indication that the VPAT has not been updated and that materials might not meet federal requirements and standards for accessibility. Ask the vendor if they plan on providing a more recent VPAT.*

A VPAT is not an accessibility audit report of a product; rather, it provides information provided by the vendor regarding accessibility compliance of a product. An accessibility audit, on the other hand, is conducted by an accessibility specialist. As such, an accessibility audit should be completed prior to adopting any digital instructional materials. The [accessibility rubric](#) can be used as an internal accessibility audit. **An important note: If the VPAT is not provided by the vendor, the VPAT does not look accurate on the basis of the above look- fors, or the VPAT notes that one or more success criteria are noted as “does not support,” school and district leaders are encouraged to either contact the vendor for more information or identify another curricular product.**

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Accessibility FAQs

1. What are VPATs and ACRs and why are they important?

A **Voluntary Product Accessibility Template (VPAT)** is a template that a vendor completes to show that they are in compliance with the Web Content Accessibility Guidelines (WCAG) and/or [section 508](#) of the Rehabilitation Act of 1973. The **Accessibility Conformance Report (ACR)** is a completed VPAT. High-quality ACRs have been completed by a third-party and include manual verification of testing. A vendor simply providing an ACR does not mean that all materials are accessible. When adopting materials, complete an initial review of a provider's VPAT and to ask if the provider has had an accessibility audit conducted by an independent vendor.

2. How should an ACR be incorporated into the evaluation of digital instructional materials?

The ACR is helpful in evaluating digital instructional materials. The ACR is needed to engage in a self-assessment of instructional materials using the [accessibility rubric](#). The vendor should be asked to provide this at the start of the adoption process.

3. What is a good way to communicate accessibility requirements to digital instructional materials vendors?

There are several legal requirements regarding accessibility in instructional materials. The National Center for Accessible Education materials [provides sample language for digital accessibility requirements](#). This language can be adapted for local needs to copy and paste into adoption process materials and contracts.

4. What accessibility features might be built into the vendor's digital instructional materials?

Common accessibility features include headings, color contrast, links, labels, text to speech, image description, transcripts, and landmarks. Accessibility features should be assessed, which can be done by asking the provider to provide an ACR.

5. If the provider is willing to complete a VPAT, how can its validity be assessed?

[Understanding the VPAT](#) is a helpful tool that explores the benefits and limitations of VPATS and shares an exemplar of an ACR.

6. What if the provider cannot or will not provide a VPAT?

If a provider cannot provide a VPAT, this might be a sign that their accessibility compliance may not be adequate. A good place to figure out how to start this conversation with a curriculum provider is CAST's [Communicating Digital Accessibility Requirements](#) in the Related Resources section.

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7. Can it be expected to find providers with perfect ACR scores?

Digital accessibility is very nuanced, and a good ACR usually presents a product’s accessibility support in shades of gray. It is not necessarily a bad thing to see some criteria listed as “Partially Supports”, with notes detailing where this criteria is met and where there are outstanding areas of need. This demonstrates that the vendor has carefully considered the criteria and reflected on how they can continually improve to provide an accessible user experience.

If a provider claims that all of their materials are 100% accessible (all criteria scored as “Supports”), this should give pause for thought. It is rare for a product to be truly accessible across all areas, and a perfect score may indicate that the accessibility review was not as thorough (or as accurate) as would be desired. Criteria scored as “Supports” should have detailed notes describing exactly how support for this criteria is implemented. If you find a VPAT with all “Supports”, particularly if no notes are provided, follow up with the vendor to ask how they tested these items and request a demonstration to illustrate how these supports are implemented and utilized within their product.

8. Are there certain accessibility guidelines or standards that should be followed for digital instructional materials?

To make educational digital instructional materials accessible, they should follow best practices and guidelines for accessibility, such as the [Web Content Accessibility Guidelines](#) (WCAG). These guidelines provide a set of standards for making digital content accessible to people with disabilities, including those with visual, auditory, motor, or cognitive impairments. Designing for accessibility addresses opportunity gaps that emerge when students face barriers to accessing curriculum. Ensuring that all students have the opportunity to learn is a key component of educational equity.

9. Is there existing guidance developed by ODE that I can reference when ensuring that the digital instructional materials in my program are accessible?

The [Online and Remote Learning Guidance: Critical Requirements and Design Indicators](#) includes recommendations specific to adopting and implementing digital instructional materials. Indicator 1.4 of this document gives specific guidance on instructional materials.

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Accessibility Rubric

Note: The rubric below is a supplement to the [Adoption Criteria for Instructional Materials](#) required by [OAR 581-022-2350 Independent Adoption of Instructional Materials](#). This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Criterion 1.1. Accessibility

Accessibility Metrics				
	Score	2 points	1 point	0 points
Metric 1: Accessibility Standards		Materials meet accessibility guidelines (i.e. local accessibility legislation and/or W3C WCAG 2.0 AA standards).	Materials have some limited capacity to meet accessibility guidelines.	Materials fail to meet accessibility guidelines or no information of compliance has been made available for the tool.
Metric 2: Student Participation		Materials are designed to address the needs of diverse users, their various literacies, and capabilities, thereby widening opportunities for participation in learning.	Materials are somewhat limited in capacity to address the needs of diverse users, their various literacies, and capabilities.	Materials are restrictive in meeting the diversity of needs reflective in the student body. The tool likely restricts some learners from fully participating.
Metric 3: Cost of Use		All aspects of the digital materials can be used free of charge.	Limited aspects of the digital materials can be used for free with other elements requiring payment of a fee, membership, or subscription.	Use of the tool requires a fee, membership, or subscription.
Metric 4: Independently Evaluated		Materials have been independently evaluated by a third party for accessibility, and complete evaluation is available. An ACR has been completed.	Materials have been evaluated by accessibility experts within the vendor's organization. An ACR has been completed.	Materials have not been independently evaluated. The vendor may have evaluated materials for accessibility, but no ACR has been filed.
Total	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Accessibility Key Terms

ACCESSIBLE: Refers to materials that can be easily used by students with a variety of learning needs.

ACCESSIBILITY CONFORMANCE REPORTS (ACR): The Accessibility Conformance Report or ACR is a completed VPAT (See below). High-quality ACRs have been completed by a third-party and include manual verification of testing.

ASSISTIVE TECHNOLOGY (AT): Assistive technology (AT) can help a person with a disability operate a computer. AT includes grammar checkers, alternative keyboards, hands-free interfaces, and the text-to-speech software.³

DIGITAL INSTRUCTIONAL MATERIALS: While there is no definition of “digital instructional materials” in Oregon rule or statute, ODE is using the term as a working definition to describe learning platforms that contain scope and sequences on a single subject or on multiple subjects. Digital instructional material platforms create one central place for students to interact with materials.

INSTRUCTIONAL MATERIALS: For purposes of rules adopted by the State Board of Education and for policies established by the Oregon Department of Education, “instructional material” means any organized system which constitutes the major instructional vehicle for a given course of study, or any part thereof.

UNIVERSAL DESIGN FOR LEARNING (UDL): Universal Design for Learning (UDL) refers to the design of products and environments so that they are usable by everyone, to the greatest extent possible. Teachers are applying universal design when they purchase curriculum with built-in, multiple, and flexible methods of presentation, expression, and engagement. The manager of a computer lab is applying universal design when they purchase adjustable tables in anticipation of students who are small or large in stature or who use wheelchairs.⁴

VOLUNTARY PRODUCT ACCESSIBILITY TEMPLATE (VPAT): “The VPAT is meant to help U.S. federal government agencies determine how well the products they purchase meet the Section 508 accessibility standards” ([National Center on Accessible Educational Materials](#)). It is the template that is used to complete an ACR.

WEB CONTENT ACCESSIBILITY GUIDELINES (WCAG): [WCAG guidelines](#) provide a set of standards for making digital content and platforms accessible to people with disabilities, including those with visual, auditory, motor, or cognitive impairments.

3 [How can K-12 educators promote the use of accessible technology in schools?](#)
Disabilities, Opportunities, Internetworking, and Technology

4 [How can K-12 educators promote the use of accessible technology in schools?](#)
Disabilities, Opportunities, Internetworking, and Technology

Resources for Accessibility

The following tools may be used to test the accessibility compliance of websites and digital materials. Please note that many tools are designed to assess for a specific accessibility feature or guideline and may not provide an exhaustive report of accessibility errors. It is best practice to test accessibility compliance using a variety of evaluation tools.

Accessibility Testing Tool
How to install ANDI, the accessibility and Section 508 compliance testing tool.

Get ANDI

ANDI Drag to your bookmarks toolbar.

Runs on desktop browsers:

- ▶ [ANDI \(Accessible Name and Description Inspector\)](#) This is a free compliance testing tool from the Social Security Administration that checks on accessibility items such as images, links, structures, and color contrast. This tool easily installs into the bookmark bar.

Hemingway

Hemingway App makes your writing bold and clear.

The app highlights lengthy, complex sentences and common errors. If you see a yellow sentence, shorten or split it. If you see a red highlight, your sentence is too dense and complicated that your readers will get lost trying to follow its meandering, splitting logic — try editing this sentence to remove the red.

You can utilize a shorter word in place of a purple one. Click on highlights to fix them.

Adverbs and weakening phrases are helpfully shown in blue. Get rid of them and pack words with force. **perils.**

Phrases in green have been **marked** to show passive voice.

Hemingway AI is here to help. Click highlights to reveal a "Fix it" button. Or, type "r" to have Hemingway AI finish your paragraph for you.

Words: 151

Readability: Grade 6

Good.

adverbs, meeting the goal of 2 or fewer

use of passive voice, meeting the goal of 3 or fewer

phrase has a simpler alternative.

- ▶ [Hemingway App](#). This is a readability tool that allows for the pasting of text from a source in order to analyze reading level, sentence structures, and readability.

Readability Analyzer

Figures the readability of a passage of text using the Flesch Reading Ease, Fog Scale Level, Flesch-Kincaid Grade Level, and other metrics.

Phrase to Analyze:

Overall Readability: Paragraph Level Results: Other Readability Tools:

Passage Statistics:

Number of Sentences:

Words Per Sentence:

Characters Per Word:

Percentage of Difficult Words:

Words of Unusually Frequent Length:

Readability Scores:

Flesch Reading Ease (F):

Grading Fog Scale Level (F):

Flesch-Kincaid Grade Level (F):

SMOG Grade (F):

MOG Grade (F):

MOG Score (F):

Date/Class Score (F):

Try Readability Grade:

- ▶ [Readability Analyzer](#). This is a readability tool that allows for pasting of text from a source and provides evaluations from a variety of readability frameworks.

National Center on Accessible Educational Materials

Get Started - Acquire - Create - Use - Coordinate - About Us - Read about

Home / Acquire / Communicating Digital Accessibility Requirements

States, school districts, universities, and job training programs can improve access to learning opportunities by communicating digital accessibility requirements as part of the curriculum adoption or procurement process. Did you know that under federal law education agencies and institutions are obligated to ensure that learners with disabilities can access the materials and technologies chosen for a curriculum? A common misconception is that this responsibility is on developers and vendors.

One way that your agency or institution can communicate a commitment to digital accessibility requirements is to include clear language in RFPs, Instructional Materials Adoption, and in contracts. If

- ▶ [Communicating Digital Accessibility Requirements](#). This tool from the National Center on Accessible Education Materials provides sample language for accessibility questions that should be asked to digital instructional material vendors.



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Considerations for Multi-Subject Digital Instructional Materials

- **Define:** Multi-Subject Digital Instructional Materials (MSDIM) integrate multiple content areas into one program that is used as the core component of instruction for multiple subject areas. They are often adaptive or algorithm based.
- **Assess:** Programs that are adaptive and/or include interactive components do not conform to the National Instructional Material Accessibility Standards (NIMAS) format. For these programs, request an Accessibility Conformance Report and determine the program’s adherence to the Web Content Accessibility Guidelines (WCAG) 2.0 AA standards. Where possible, request an ACR from the vendor that has been completed by a third-party and manually tested.
- **Evaluate:** Many MSDIM programs do not contain static files (PDF, EPUB) that can be used for translating materials into alternate formats. Districts that serve students who require braille or other print accommodations must consider whether the MSDIM program can be provided in the accessible format required by the student’s IEP or 504 Plan.

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ADAPTIVE LEARNING IN DIGITAL INSTRUCTIONAL MATERIALS PLATFORMS



Why Adaptive Learning Matters

Adaptive learning generally refers to a software platform’s ability to assess a student’s knowledge and/or skills in real time and adjust the learning on the basis of a student’s strengths and needs. Digital software platforms that integrate adaptive learning have the potential to provide challenging yet appropriate instruction for students at a variety of skill levels. In essence, after a student demonstrates proficiency in a concept, the software would adapt the level of difficulty for the next activity. For example, adaptive learning in a Spanish class might allow students who have had more experiences and exposure to the language to access materials that are appropriately challenging to their learning level. Likewise, if another student does not have extensive experience with a concept, the software could adapt to provide learning opportunities to teach and reinforce that concept. In this example, each student would access materials and skills that are appropriate for their level at a specific point in time. The U.S. Office of Technology observes that the term “adaptive” is evolving and becoming more broad in nature and that “adaptive” should not always be a synonym for individualized learning because people are social learners.⁵ This would imply that adaptive technology is evolving to include other students in an immersive adaptive environment.



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5 [Artificial Intelligence and the Future of Teaching and Learning](#), Office of Educational Technology, May, 2023

Photo courtesy of Portland Public Schools

While these adaptations are designed to result in increased individualized learning opportunities for the student, the Oregon Department of Education (ODE) advises schools and districts to exercise caution when considering the adoption of digital instructional materials platforms that rely heavily on adaptive learning. One of the biggest challenges with this type of learning is that the students' learning experiences, activities, and pathways are determined by algorithms that often contain biases, and when implemented without the direction of a human teacher, can misdiagnose the appropriate learning content for an individual student. Algorithm-based instruction can make it difficult for educators to use their expertise to design individualized instruction for students as well as evaluate the effectiveness of the learning pathway provided by the software platform.

Although embedded in educational technology and digital resources for many years, the technology driving Artificial Intelligence (AI) has grown exponentially over recent years and is impacting how educators use digital instructional materials. AI, including generative AI (genAI), has the potential to enhance adaptive learning in many ways. Possibilities include the potential for improved personalized learning opportunities, immediate high-quality tutoring and feedback, better assessment, and enhanced teacher support. All of these are possible now and will likely continue to improve with time. For more information on genAI in classrooms, please see ODE's [Generative Artificial Intelligence \(AI\) in K-12 Classrooms](#) guidance released in August 2023.

Despite these challenges, adaptive learning continues to play an integral role for many schools and districts adopting digital instructional materials. As schools make decisions regarding the use of adaptive learning platforms, several key considerations should be kept at the forefront.

Key Considerations

1. PEDAGOGY

- **Define specific learning goals and objectives for the use of adaptive learning.** Center the learning goals and objectives in the digital instructional materials evaluation and adoption process to ensure that if a software platform that uses adaptive learning is used, that it will effectively and efficiently meet student needs. Adaptive learning tools should be used to supplement and support teacher directed instruction rather than serve as a replacement. Additionally, while adaptive learning tools can be a useful addition to a well-rounded educational program, they should not be relied upon as the sole source of instruction.
- **Ensure that the tool is appropriate for the age and skill level of the students.** As adaptive learning platforms are not a one size fits all educational tool, engage in dialogue with educators, school staff, families, and students to ensure that the platform is appropriate.
- **Provide ongoing support and guidance.** Adaptive learning tools should be used to supplement teacher directed instruction rather than serve as a replacement. If an adaptive learning platform is adopted, ongoing support and guidance should be provided to ensure that the platform is used in equitable and intentional ways to meet student needs. This includes providing professional learning opportunities to educators, creating clear lines of communication with families and caregivers regarding the use and purpose of the platform, and providing clear support and guidance to learners, including providing instructions, resources, and assistance as needed.

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2. TRANSPARENCY

- **Ask the instructional materials provider for their vision of classroom use.** Engage in dialogue with the vendor/provider about how they see this platform fitting into the instructional materials ecosystem to better understand how the adaptive tools can be used in the classroom. Enter the conversation with clearly defined learning goals for the use of the platform when asking questions of the vendor/provider. Vendors/providers should articulate how their adaptive materials fit into a larger vision of teaching and learning.
- **Evaluate the effectiveness of the adaptive tools embedded in a platform.** Adaptive learning tools have the potential to provide useful data on student progress and areas of improvement if the data are regularly reviewed and instruction is adapted to support student needs.⁶ Engage in dialogue with the vendor/provider to learn about the data provided as part of the software platform to determine how effective it will be in meeting student needs. Prior to adopting a software platform that uses adaptive learning, administrators should work with educators and IT staff to ensure that the platform provides useful data on student progress and can be easily accessed to support data-based instructional decisions.

3. FLEXIBILITY

- **Evaluate the flexibility of the tools embedded in a platform.** Adaptive learning has the potential to support individualized student pathways on the basis of their strengths and needs. Engage in dialogue with the vendor/provider to learn about the tools embedded in the platform, including their ability to meet the needs of students with disabilities and multilingual learners.
- **Ensure that the platform allows for teacher agency.** While adaptive learning uses algorithms to determine a student's learning pathway on the basis of their responses, this can lead to instruction relying solely on the platform rather than the expertise and decision-making of the educator. Engage in dialogue with the vendor/provider to ensure that teachers have the permissions within the platform to edit the algorithm's selections to meet student needs and ensure that teachers remain central to the learning process.

4. BIAS

- **Evaluate the bias in the platform.** Understanding that adaptive learning platforms have the potential to be biased as they are built on algorithms, engage in dialogue with vendors, asking to review the materials prior to adoption to ensure that equity implications are being considered. Additionally, ensure that vendors have a process to address biased content when it is identified and that there are clear and open communication pathways that are supportive of equitable learning environments.

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6 Office of Educational Technology's [Teacher Digital Learning Guide](#)

Adaptive Learning Key Terms

ADAPTIVE LEARNING: The delivery of custom learning experiences that address the unique needs of an individual through just-in-time feedback, pathways, and resources (rather than providing a one-size-fits-all learning experience). Adaptive learning is often used in the context of differentiated instruction when a digital learning platform or application adapts curriculum or questions based on an individual student’s responses.⁷

ALGORITHM: An algorithm is a process or set of rules to be followed in calculations or other problem-solving operations, typically by a computer. Algorithms are used in adaptive learning platforms in order to provide individualized materials for students.

DIGITAL INSTRUCTIONAL MATERIALS: While there is no definition of “digital instructional materials” in Oregon rule or statute, ODE is using the term as a working definition to describe learning platforms that contain scope and sequences on a single subject or on multiple subjects. Digital instructional material platforms create one central place for students to interact with materials.

Equity Implications

As mentioned earlier, algorithm-based learning may include biases, such as examples or problem sets that are geared towards a specific cultural background, gender, or ability and could lead to a miscalculation of student knowledge or skill. Vendors should be able to explain when and how adaptive learning can be meaningful as well as any assumptions in the algorithms and data sets used that drive instruction. Vendors should articulate what safeguards they have in their process to address biases in their digital instructional materials as well as what actions they take when biases are identified.⁸

In addition, adaptive learning should not be confused with student voice and choice. As the platform is making the decisions regarding student’s learning pathways, neither the student nor the teacher have the agency to determine what is next in their pathway. While this can provide an individualized learning experience for students, it is important to remember that teachers are the experts. In classrooms where an adaptive learning platform is used, teachers continue to play a crucial role in adapting instruction to meet student needs and honor student voice.

7 <https://www.smartsparrow.com/what-is-adaptive-learning/>

8 [EdTech Systems Guide Developing and strengthening edtech selection, implementation, and evaluation systems](#), The Learning Accelerator

Adaptive Learning Rubric

Criterion 1.2 Adaptive Learning

Note: The rubric below is a supplement to the [Adoption Criteria for Instructional Materials](#) required by [OAR 581-022-2350 Independent Adoption of Instructional Materials](#). This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Adaptive Learning Metrics				
	Score	2 points	1 point	0 points
Metric 1: Pedagogy		Vendor provides a clear explanation of how educators can use adaptive learning in meaningful ways as part of an integrated learning environment.	Vendor provides an explanation of how educators can use adaptive learning, although some descriptions might not be aligned with best practice.	Provider does not address or minimally addresses how educators can use adaptive learning within the overall context of teaching and learning.
Metric 2: Transparency		Vendor shares the assumptions about how the materials are being used to drive instruction.	Vendor shares assumptions in a general sense with an explanation of how they drive instruction but are not willing to share the algorithms.	Vendor does not share algorithms or assumptions. Algorithms are proprietary and/or the vendor cannot clearly explain how they are being used.
Metric 3: Flexibility		Adaptive learning features can meet the needs of all students and engage students in meaningful ways and allow for teacher agency.	Adaptive learning features meet the needs of most students, although engagement is only sometimes meaningful. Features allow for some teacher agency.	Adaptive learning features meet the needs of only some students. Adaptive tools allow for little to no teacher flexibility in how they are adapted for use.
Metric 4: Bias		Vendor has a documented history of actively addressing bias and has a clear process for adapting algorithms and content.	Vendor has a documented history of addressing bias but does not have a clear process for adapting algorithms and content.	Vendor does not have a documented history of addressing bias and/or has no plans for adapting and changing biased algorithms and content.
Total Score	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

The following rubric can be used to supplement an independent instructional material process or (A rubric with all criteria can be found on the [Oregon Digital Instructional Materials Rubric webpage](#). The rubric on this page is a fillable template and can be used for individual evaluation of materials.)

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Adaptive Learning FAQs

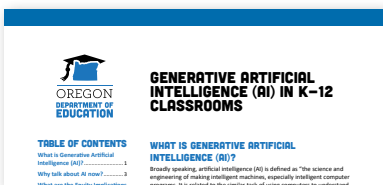
1. What are some of the biggest challenges with the use of adaptive learning?

- **Bias:** Algorithms can perpetuate and amplify biases of the selected data used to create learning experiences. This can lead to unequal treatment or outcomes for certain groups of people. Additionally, some adaptive learning tools are aligned to specific curricula and might not be appropriate for the stated course outcomes.
- **Lack of transparency:** Many algorithms used for digital instructional materials and educational technology are considered to be proprietary content. For this reason, many vendors are not able to share the algorithm(s) being used to drive instruction. Absent an audit of the algorithms, it can be difficult to understand how a program arrives at each decision, increasing challenges with detecting and addressing potential biases or errors.
- **Lack of flexibility:** Adaptive learning systems are designed to follow predetermined rules and procedures, which can limit their ability to adapt to the needs and preferences of individual students.

2. How can adaptive learning affect learning environments?

Digital instructional materials that implement adaptive tools can create personalized and differentiated learning experiences that adapt to a student’s interests, skill levels, and learning styles. Adaptive tools can allow for immediate feedback in order to facilitate less down time and more engagement. However, when AI is used for formative and summative assessments, the teacher needs to monitor this use in order to create appropriate and challenging classroom curriculum, and teachers still need to foster classroom cultures that provide for collaborative learning and peer to peer feedback.

Resources for Adaptive Learning within Digital Instructional Materials



- ▶ [Generative Artificial Intelligence \(AI\) in K-12 Classrooms](#). This ODE guidance document discusses equity and student data privacy implications as well as potential uses of AI in classrooms.



- ▶ [Artificial Intelligence and the Future of Teaching and Learning](#). This publication includes a discussion of what is meant by adaptive learning and also explores different types of adaptive learning models.



- ▶ [Issues to Consider Before Adopting a Digital Platform or Learning Program](#). This report examines pedagogical challenges posed by digital learning platforms and adaptive or “personalized” learning.



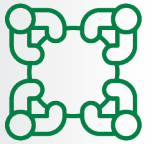
- ▶ [Guidance on Algorithms in K-12 Education](#). This report discusses the harms done by algorithmic systems learning if they are not carefully managed and implemented.



- ▶ [Measuring Reading Comprehension Is Hard](#). Can AI and Adaptive Tools Help? This article highlights AI’s role in literacy, gaps in reading assessments, challenges in measuring comprehension, and the integration of non-AI adaptive tools into instruction.



CULTURALLY RESPONSIVE INSTRUCTIONAL MATERIALS



What are Culturally Responsive Digital Instructional Materials and Why Do They Matter?

Culturally responsive materials can help to create a more inclusive and welcoming learning environment for all students, across multiple cultural backgrounds, and is based on the idea that all students can learn and succeed when their cultural backgrounds are recognized and valued⁹. A culturally responsive classroom, then, includes rich opportunities for students to engage with culturally responsive digital instructional materials as well as pedagogy that affirms each student’s backgrounds and assets. Because of the assistive and adaptive nature of educational technology and digital learning, digital instructional materials have additional capability to: disrupt systems that oppress and marginalize students, families, and communities; engage and empower students and families; and affirm students’ racial, cultural, and linguistic identities. The surge in online learning that was necessitated by the COVID-19 pandemic provides an ongoing opportunity to carry forward learned best practices and to leverage these practices. With digital materials, educators may have more options to diversify content and adapt instruction to be culturally responsive to the specific classroom culture.

It is important to note that, unlike printed materials, vendors are more likely to have increased diverse representation and customization to meet classroom needs with digital materials. Vendors can also change digital materials more quickly than printed materials to address inequities or bias.

Equity Implications

Within [ODE’s Online and Remote Learning Guidance](#), Indicator 1.4 centers the importance of having a robust instructional materials evaluation process and highlights the impact of culturally responsive instructional materials on student belonging and outcomes. The guidance notes that actively engaging in the materials adoption process “is integral to ensuring that all students have equitable access to high-quality, culturally responsive- sustaining and differentiated instruction wherein community input is valued and teachers are empowered to use their professional judgment to do what is best for their students.” By acknowledging and valuing the diverse cultures and experiences of students, educators can create a positive and inclusive learning environment that is welcoming and engaging for all students. It is worthy to note, however, that culturally responsive digital instructional materials alone do not lead to a culturally responsive classroom as it takes both intentional pedagogy and materials to accomplish this goal. While adopting inclusive materials is critically important, providing teachers with sustained professional development, coaching, and support in the area of culturally responsive pedagogy can help to create equity-centered classrooms. Cultural inclusivity is an ongoing process, and digital instructional materials should be regularly reviewed and updated to ensure they remain culturally inclusive and responsive.

9 [Inclusive Classroom Climate, Yale Poorvu Center for Teaching and Learning](#)

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The Importance and Impact of Reviewing Digital Instructional Materials with an Equity Lens: A Case Study from Hawaii, 2020

As part of the instructional materials review of digital instructional materials implemented in the state of Hawaii, a state agency civil rights panel brought forth the following concerns about Acellus Accelerator.

- Kindergarteners were asked “What is a family?” then asked students to choose either an image of a Black mother and son or a white mother and father with their white son.
- A multiple-choice question asked students to name the terrorist group Osama bin Laden led, and one response option is “Towelban.”

In response to concerns about the appropriateness of the materials, the Hawaii Board of Education authorized an [Instructional Content Review](#). The review included violations of protected classes with respect to the Board of Education’s Policy 305-10 and Policy 900-3. In part, the analysis concluded that:

- The following protected classes have been identified as being discriminated against: gender, national origin, race, physical appearance, religion, ethnicity, and socio-economic status.
- The discriminatory content of some of the lessons also violates the Department’s Code of Conduct, specifically the section that prohibits an employee, contractor, or volunteer from discriminating against, including harassing, any students based on his/her race, color, national origin, sex, disability, and/or age.
- The content appears to promote religion in public schools.
- While the curriculum “may be viewed as antiquated, this does not excuse the fact that it contains numerous discriminatory lessons and a showing of gender, cultural, and racial biases.”

As a result of the in-depth curriculum review, the Hawaii Board of Education voted to phase out the Acellus program at the end of the 2021 school year.

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Criterion 1.3 Culturally Responsive Materials

Note: The rubric below is a supplement to the [Adoption Criteria for Instructional Materials](#) required by [OAR 581-022-2350 Independent Adoption of Instructional Materials](#). This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Culturally Responsive Metrics				
	Score	2 points	1 point	0 points
Metric 1: Thematic Representation		All students can see themselves in terms of different identity markers in the digital curriculum and have opportunities to learn from a variety of perspectives.	Most students can see themselves in the digital curriculum. Students occasionally get a chance to explore multiple points of view and perspectives.	Many students cannot see themselves in the digital curriculum and rarely have an opportunity to explore multiple viewpoints and/or hear multiple voices.
Metric 2: Visual Representation		Photos and videos provide diverse and non-stereotypical images.	Photos and videos provide somewhat diverse and non-stereotypical images.	Photos and videos lack diversity and/or provide stereotypical images.
Metric 3: Authorship		Authors come from a wide variety of backgrounds and and/or non dominant cultural perspectives.	Authors come from several different backgrounds but scope is somewhat limited.	Authors only come from dominant cultural perspectives.
Total Score	____/6			

Meets Expectations (6 points)

Partially Meets Expectations (4-5 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

Culturally Responsiveness Key Terms

CULTURALLY RESPONSIVE: The implicit recognition and incorporation of the cultural knowledge, experience, and ways of being and knowing of students in teaching, learning and assessment. This includes identifying, valuing, and maintaining high commitment to: students’ cultural assets in instruction and assessment; diverse frames of reference that correspond to multifaceted cultural perspectives/ experiences; and behaviors in the classroom that can differ from white-centered cultural views of what qualifies as achievement or success.¹⁰

EQUITY: Equity involves trying to understand and give people what they need to enjoy full, healthy lives.¹¹ This differs from equity that aims to ensure that everyone gets the same things in order to enjoy full, healthy lives. Like equity, equality aims to promote fairness and justice, but it can only work if everyone starts from the same place and needs the same things.¹²

¹⁰ [Oregon Dept. of Education, Chapter 581](#)

¹¹ [Oregon Dept. of Education. Engaging Equity Series](#)

¹² [Oregon Dept. of Education. Engaging Equity Series](#)

OPPORTUNITY GAP: Opportunity Gap refers to the effects, system biases, and disparities the dominant, White supremacist system and culture has historically, currently, and intentionally created for students. Factors such as race, ethnicity, socioeconomic status, English proficiency, geography, financial wealth, gender, sexuality, familial situations, and disabilities determine or constrain what opportunities the system offers and how these affect their educational aspiration, achievement, and attainment. These effects and disparities represent a system bias and an educational debt that the dominant educational system owes to marginalized students, which necessitates the need to address and shift the system itself.¹³

UNDERREPRESENTED: Underrepresented refers to communities, groups, families and students that due to systemic barriers and intersectional oppression have been excluded and limited proportionate access to the dominant or mainstream educational system despite efforts to participate. This includes students of color, tribal students, English language learners, LGBTQ2SIA+ students, students experiencing and surviving poverty and homelessness, students with disabilities, women/girls, and students from rural communities.

UNDERSERVED: Underserved refers to communities, groups, families and students that the dominant or mainstream educational system has historically and currently excluded, impacted, marginalized, underserved and/or refused service due to institutionalized and intersectional racism and systemic oppression. This includes students of color, tribal students, English language learners, LGBTQ2SIA+ students, students experiencing and surviving poverty and homelessness, students with disabilities, women/girls, and students from rural communities.

Cultural Responsiveness in a Digital Instructional Materials Platform FAQs

- 1. What are some first steps in working to evaluate the need for a culturally responsive curriculum in a learning organization?**
 - Engage with diverse partners: Seek input and feedback from a diverse group of partners, including students, educators, and members of the community. Work to understand the varied cultural backgrounds of communities served and to examine their experiences with the currently adopted instructional materials. [ODE’s Aligning for Student Success Community Engagement Toolkit](#) provides concrete advice in the dynamic engagement of multiple communities.
 - Examine the materials for diversity of representation and authorship: Do they include a range of cultural perspectives and experiences, or are they primarily centered on dominant cultural perspectives?
 - Check for stereotypes and intentional and/or unconscious biases: Are the materials free from stereotypes, biases, and other forms of prejudice?
 - Look for accuracy and sensitivity: Are the materials accurate and asset-based in their portrayal of cultures and communities? Do materials avoid stereotypes and racist ideas?
 - Consider the cultural context: Are the materials relevant within the context of the classroom, and do they support diverse voices?
 - Collaborate with district professional development planners to make sure that teachers have the time and opportunity to be trained in culturally responsive pedagogy.

13 [Oregon Dept. of Education. Arts Access Toolkit Glossary](#)

2. What tools are there to help evaluate instructional materials with respect to cultural inclusivity?

Evaluating large bodies of curriculum for cultural responsiveness can be a daunting task. Using a [Culturally Responsive Curriculum Scorecard](#) (see resources) can help frame conversations for a curriculum adoption committee. A scorecard can help examine aspects such as representation, voice, and multiple perspectives. Additionally, partnering with a Diversity Equity and Inclusion (DEI) Officer from your district or from an Educational Service District can help with the intentional framing of potentially uncomfortable conversations that can occur in an adoption process.

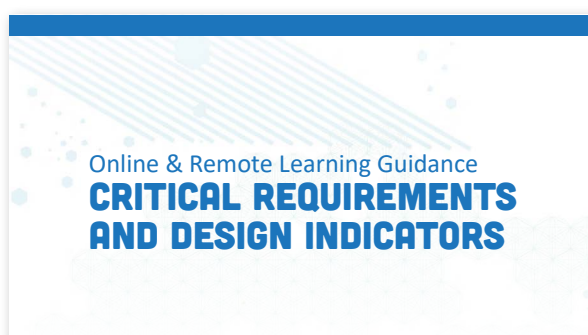
3. When evaluating a curriculum provider's digital materials, what key factors should be considered?

- Access to Materials: Providers may initially offer only a small sample of their instructional materials for review. It is entirely reasonable to request full demo access to their platform for a comprehensive evaluation, especially if the materials are already being piloted with students.
- Platform Scope: Digital instructional platforms can be extensive and complex. To get a clear understanding of a curriculum provider's commitment to cultural responsiveness, ask the provider for a broad selection of materials. Specifically, request examples that highlight a variety of perspectives, diverse and non-stereotypical images, and authors from diverse backgrounds, as this can be particularly informative and beneficial.

Resources for Addressing Cultural Responsiveness within Digital Instructional Materials



► [Evaluating Digital Instructional Materials for K-12 Online and Blended Learning](#). This TechTrends report emphasizes the importance of evaluating online learning materials and provides an evaluation framework based on accessibility, active engagement, advocacy for inclusion, and accountability.



► [Online & Remote Learning Guidance Critical Requirements and Design Indicators](#). This ODE-developed guidance document provides three key pillars which address critical components of online learning. The two stated central goals are: 1) to provide clarity regarding existing federal and state requirements and policies for online and remote schools; and 2) to share design indicators and provide tools for school and district operators and leaders to use in planning for continuous improvement and innovation.



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INTEROPERABILITY IN DIGITAL INSTRUCTIONAL MATERIALS PLATFORMS



What is Interoperability and Why Does It Matter?

Interoperability in an educational context refers simply to a student’s ability to access different educational technologies easily and efficiently. In technical terms, interoperability is the ability of different systems, devices, or applications to connect and communicate in a coordinated way, without effort from the end user. Early and ongoing inclusion of IT professionals in your organization is best practice and is a proactive way in avoiding interoperability challenges later in the process when they are harder to rectify.

Interoperability in the digital classroom allows different educational technologies and systems to work together to seamlessly exchange information. Access-related barriers to learning are minimized when a student can easily access classes, assignments, grades, and feedback through a single login and landing page. With respect to digital instructional materials, interoperability is a main consideration during the adoption process, as a vendor’s curriculum should fit seamlessly into the existing digital learning environment (i.e. learning management system (LMS), single sign-on (SSO), grade reporting) of a school or school district. When evaluating a digital instructional material platform to determine interoperability, some questions to consider include:

- Do students and teachers have a SSO to access the digital curriculum and the LMS?
- Can students easily find teacher feedback within the digital instructional materials?
- Can students’ families and caretakers easily access student work, teacher feedback, and grades?
- Do students and their families have an adequate device and a sufficient internet connection to access digital content?
- Is the process for sharing instructional materials, providing feedback, and giving grades seamless and transparent for teachers?

Answering these questions can help schools and districts to improve the efficiency and effectiveness of educational processes related to interoperable educational technology, as well as increase the useability of educational resources for students, teachers, and families and caretakers.

Centering student experience and usability when adopting digital instructional materials is key to creating an online learning environment that is conducive to success and provides equitable access for all students. Being intentional in addressing interoperability ensures that barriers to access will be addressed before the purchase of digital instructional materials and not afterwards – creating a proactive rather than reactive system. One key strategy to ensure that digital instructional materials are interoperable with a school or district’s LMS is to intentionally integrate interoperability into the adoption criteria.

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Furthermore, allow time in the adoption process to collect feedback from students and families with respect to ease of use. Student and parent feedback on how easy it is to access digital instructional materials is key in creating a better and more supportive learning environment for students.

Key Policies

Becoming familiar with federal and state policy regarding instructional materials adoptions provides a framework for discussions with vendors when discussing the interoperability of digital instructional materials. Two key policies are [Oregon Revised Statute \(ORS\) 337.075](#) and [Oregon Administrative Rule \(OAR\) 581-011-0087: Textbook Adoption Oregon Chapter 581-011-0087: Textbook Adoption](#).

- ORS 337.075: The State Board of Education has the authority to adopt or reject any textbook contained in any proposal. This authority extends to considerations around interoperability as a criterion in the textbook adoption process, as addressed in OAR 581-011-0087.
- OAR 581-011-0087: Textbook Adoption refers to the ability of different education systems or programs within the state of Oregon to exchange data and information with one another in a way that allows for seamless communication and collaboration.

Interoperability is not only essential within a district, it is also a critically important factor when districts work to collaborate and to share information.

Equity Implications

Interoperable systems can create more equitable learning environments by removing barriers to accessing curriculum, allowing for adaptive formative and summative assessments, and providing additional options for personalized and engaging learning. However, students feel frustrated and discouraged from difficulty accessing digital instructional materials, inequities grow; students who have technology support outside of school are more likely to navigate the systems, while students who do not are less likely to obtain access to the materials that they need to learn.

Interoperability and School/District Information Technology (IT)

When adopting digital instructional materials, include IT specialists and technology teaching specialists/coaches within the organization at the start of the adoption process. IT specialists can assess the interoperability of a vendor’s curriculum within the school or district’s existing infrastructure by providing specific information about the technical specifications needed to ensure the curriculum works seamlessly within the existing hardware and software platforms. IT specialists are more likely to know the types of detailed questions to ask vendors to be asked to ensure interoperability. A particularly

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helpful document titled [Considerations for Adoption of Digital Instructional Materials and Tools](#) can be found on the [Cross-ESD Curriculum & Adoption Collaborative website](#). Collaboration early in the process will help to prevent an ineffective digital curriculum adoption and can also help to prevent costly retrofitting of digital materials.

Key Look Fors

- Will the vendor allow a pilot period for a sample of classes within the district?** *If not, consider asking the vendor if they have contact information for other districts in order to ask about their experiences with interoperability? If no information is provided, this can be an indication that the vendor does not have the capacity to provide adequate support, nor do they have transparent practices.*
- Does the vendor have information regarding compatible learning management systems readily available on their website?** *If not, this will require a conversation with the vendor early in the adoption process in order to ensure that there is a clear understanding of whether or not this will be a good fit.*
- Is the vendor willing to set up a trial integration to see how the digital curriculum interfaces with the district alongside one on one conversations with a district's IT specialists?** *If not, this could indicate that the vendor does not have the capacity to provide IT related services and could serve as a barrier to ensuring interoperability between the curriculum, the learning management system, and the student information system.*
- Does the vendor have a dedicated IT department as well as a point person when it comes to interoperability questions?** *If not, this could indicate that the vendor does not have the capacity to provide IT related services and thus could serve as a barrier to ensuring interoperability between the curriculum, the learning management system, and the student information system.*
- Is there a gradebook feature within the digital instructional materials platform?** *If not, it will be important to have conversations with IT professionals, school and district administrators, counselors, and teachers to determine if the platform will still be a good fit. If there is not an interoperable gradebook feature, discuss and determine how grades will be transferred early on in the process.*

Interoperability Audit Rubric

The following rubric can be used to determine whether or not the materials meet, partially meet, or do not meet expectations with regards to interoperability. (A rubric with all criteria can be found on the [Oregon Digital Instructional Materials Rubric webpage](#). The rubric on this page is a fillable template and can be used for individual evaluation of materials.) When using this rubric, include IT staff, as they have the technical expertise needed to make evaluations. It is helpful when IT staff are included as a key collaborator through the entire adoption process, rather than being included only after the product has already been adopted. This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

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Criterion 1.4 Interoperability

Note: The rubric below is a supplement to the [Adoption Criteria for Instructional Materials](#) required by [OAR 581-022-2350 Independent Adoption of Instructional Materials](#). This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Interoperability Metrics				
	Score	2 points	1 point	0 points
Metric 1: Integration Integration/Embedding within a Learning Management System (LMS)		Digital materials can be embedded as an object via HTML or fully integrated (e.g. LTI compliant tools) into an LMS while maintaining full functionality of the tool.	Digital materials can be embedded within an LMS, perhaps with limited functionality, but cannot be fully integrated.	Digital materials can only be accessed in an LMS through a hyperlink or static representations of the materials (e.g. file export), rather than a functional version of the tool itself.
Metric 2: Operating Systems Desktop / Laptop Operating Systems		Students can effectively utilize the tool with any standard, up-to-date operating system.	Students may encounter limited or altered functionality depending on the up-to-date operating system being used.	Students are limited to using the tool with one specific, up-to-date operating system.
Metric 3: Compatibility Browser compatibility		Students can effectively utilize the tool with any standard, up-to-date browser.	Students may encounter limited or altered functionality depending on the up-to-date browser being used.	Students are limited to using the tool through one specific browser.
Metric 4: Rostering		Allows for seamless integration of student information from the Student Information System (SIS).	Allows for integration of student information from the SIS with minor challenges.	Does not allow for seamless integration of student information from the SIS.
Metric 5: Single Sign-On (SSO)		Allows for easy integration of SSO by IT Department.	Allows for integration of a SSO with extra efforts and tools from IT Department.	Does not allow for SSO. Students will have to sign on separately to the platform.
Metric 6: Grade PassBacks		<i>If</i> digital materials have a grading component where grading is done on the platform, grades can be transferred back to the LMS and/or the Student Information System (SIS).	<i>If</i> digital materials have a grading component where grading is done on the platform, only some components (e.g. points but no qualitative comments) can be passed back.	<i>If</i> digital materials have a grading component where grading is done on the platform, there is limited to no ability to transfer grades and feedback from the digital materials platform to an LMS or Student Information System.
Total	____ / 12			

Meets Expectations (11-12 points)

Partially Meets Expectations (9-10 points)

Does Not Meet Expectations (<9 points OR a 0 is given for any required metric)

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Interoperability Key Terms

INTEROPERABILITY: This term refers to the ability of different systems, devices, or applications to connect and communicate in a coordinated way, without effort from the end user.

LEARNING MANAGEMENT SYSTEM (LMS): A Learning Management System is a software platform that is used to plan, deliver, and track coursework and student progress. Many LMS also offer features such as discussion forums, collaboration tools, and integrations with other learning resources, such as online textbooks and other types of digital instructional materials. Examples include: Canvas, Blackboard, Buzz, etc.

DIGITAL INSTRUCTIONAL MATERIALS: While there is no definition of “digital instructional materials” in Oregon administrative rule or statute, ODE uses the term as a working definition to describe learning platforms that contain scope and sequences on a single subject or on multiple subjects. Digital instructional material platforms create one central place for students to interact with materials.

HTML (HYPERTEXT MARKUP LANGUAGE): HTML is a standard language used for creating web pages and is essential for web page development. It enables web browsers to display content to users.

LEARNING TOOLS INTEROPERABILITY (LTI) COMPLIANT TOOLS: These tools allow for interoperability of digital instructional materials with a learning management system. This means that digital instructional materials can be embedded within the LMS so that students do not have to navigate elsewhere.

STUDENT INFORMATION SYSTEMS (SIS): A software application used by school districts to manage student data such as academic records, attendance, personal information, and grades.

SINGLE SIGN-ON (SSO): A login mechanism that allows students to securely access multiple applications with one entry of a user id and password. It means that there is not a need for a student to remember multiple logins and passwords to access different educational resources.

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Interoperability FAQs

1. Should a student have separate login credentials for their digital instructional materials platform?

Ideally, a digital instructional materials platform should integrate seamlessly into the district's existing digital learning environment. Once a student logs into the district platform, they should not have to log on a second time to the digital instructional materials platform. There should be a seamless interchange of login information credentials between the digital instructional materials platform and the district platform. If this is not the case, schools and districts should work with curriculum vendors to better understand their options in order to create a more integrated user experience for students. Ideally, it should be easy for students to move between schools within a district and even between districts without significant interruptions in their learning.

2. Should Digital Instructional Materials be able to integrate into a school district's learning management system (LMS)?

Many districts currently use a LMS to organize the learning, feedback, and assessments of all students. Some digital instructional material platforms can integrate directly into the LMS, while others exist separately outside of the LMS. Ideally, students should have access to all of their learning in one place. For example, a student should be able to access an assignment and the related curriculum directly within the LMS. If this is not the case, schools and districts should work with curriculum vendors to better understand their options in order to create a more integrated user experience for students. Specifically, districts should ask vendors about SSO options as well as the ability of the curriculum to be embedded in the existing LMS. This ideally should happen prior to the adoption of the digital instructional materials to ensure a seamless experience for students.

3. If Digital Instructional Materials have a gradebook feature, should it be implemented?

The challenge of a gradebook feature within any digital instructional materials is whether or not it is interoperable with the district's existing gradebook. If grades from a Digital Instructional Materials platform gradebook cannot be transferred over to the district's LMS and/or district gradebook, then it forces teachers to repeat entering grades as well as requiring students to look in separate places for their grades, assignments, and teacher feedback. In order to ensure an integrated experience for students, use of the gradebook feature within the digital instructional materials platform should be based on if it is interoperable with the existing LMS. If not, then the district should consider not using the gradebook within the Digital Instructional Materials platform or work with vendors to better understand their options in order to create a more integrated user experience. Lastly, it is important to note that some districts use a standards-based grading system that might not be compatible with a more traditional percentage-based grading scale. If a digital instructional materials platform does have a grading system, it is beneficial to see if the system can accommodate the grading framework of the district.

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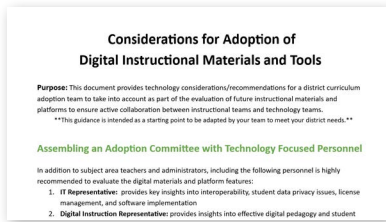
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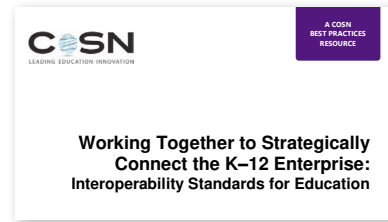
Resources for Evaluating for Interoperability



▶ [Considerations for Adoption of Digital Instructional Materials and Tools](#). This resource created by a collaborative of Oregon ESD specialists addresses topics such as assembling an adoption committee, technology and instructional services communication, technology considerations for equity and compatibility, and implementation plans.



▶ [Interoperability Toolkit](#). This tool from CoSN (Consortium for School Networking) provides both an interoperability rubric on several key measurements as well as a self assessment quiz. When beginning an adoption process, schools and districts can use this toolkit to assess the interoperability of the various digital instructional material platforms being considered for adoption. Doing so during the adoption process, schools and districts can use this as a tool for having conversations with curriculum vendors around any areas that are in misalignment.



▶ [Interoperability Standards for Education](#). These interoperability standards from CoSN are written for a non-technical audience and can be used alongside the Toolkit above.



▶ [Empowering Teaching and Learning with Interoperability](#). This Edtech Magazine article examines the importance of Interoperability as it relates to instruction and instructional materials.



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CENTERING LINGUISTIC STRENGTHS IN DIGITAL INSTRUCTIONAL MATERIALS PLATFORMS

What Does Centering Linguistic Strengths Mean and Why Does It Matter?

Oregon Department of Education’s [English Learners in Oregon Report](#) noted that there are currently over 53,000 English language learners in Oregon with 181 unique languages spoken at home. In this increasingly diverse linguistic landscape, high-quality digital instructional materials have incorporated robust language translation tools and other multilingual supports. However, translation tools should not be used in isolation. Rather, they should be a part of an integrated and intentional pedagogy that incorporates appropriate scaffolding to meet the needs of the variety of learners found in Oregon schools. Instruction should be contingent, collaborative, and interactive and include multiple scaffolding strategies such as modeling, bridging, contextualizing, schema building, text representation, and developing metacognition.¹⁴

Creating an inclusive learning environment means discovering and building on students’ strengths while embedding procedural, instructional, and verbal scaffolds alongside linguistic supports such as word banks, graphic organizers, visuals, and sentence frames to ensure that students can develop linguistically and academically. It means cultivating a learning environment wherein students’ native languages are seen as an asset to their learning, where they are able to practice translanguaging to deepen their understanding of and connection with the material. Digital Instructional Materials often contain education technology tools that support with multilingual education and creating an inclusive learning environment.

14 [Scaffolding Strategies for English Language Learners](#), Bernice Moro, Ph.D., Fordham University



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Equity Implications

Many digital instructional materials platforms use automated translation tools while some provide authentically translated materials in the most commonly used languages. Although automated translations are getting better as educational technology advances, there remains some risk associated with non-authentic translated materials. For example, some languages such as Castilian Spanish versus forms found in Central and South America, are privileged when translation occurs. Consider asking vendors specific questions about what dialects are being used in translations. In addition, automated translations might include bias in translation, using language that is outdated or not reflective appropriate use of terminology. It is important to note that translation tools in and of themselves do not guarantee effective language learning. Any language and scaffolding tools must be embedded within an intentional framework for the instruction of multilingual learners.

Criterion 1.5 Centering Linguistic Strengths

Note: The rubric below is a supplement to the [Adoption Criteria for Instructional Materials](#) required by [OAR 581-022-2350 Independent Adoption of Instructional Materials](#). This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Centering Linguistic Strengths Metrics				
	Score	2 points	1 point	0 points
Metric 1: Breadth of Options		There is a wide variety of available language choices. Languages available meet the needs of all/nearly all learners in the district.	There is an adequate variety of available language choices. Languages available meet the needs of some/most learners in the district.	There are few to no translation choices. If available, options do not meet the needs of learners in the district.
Metric 2: Translation Source		All texts are available for translation. Some have been translated by human translators.	Majority of texts can be translated within the platform. Most/all of these translations are computer generated.	Some/all texts are not available for translation.
Metric 3: Text to Speech		Platform has text to speech options in world languages. Accents and intonations are authentic.	Platform has text to speech options in target languages but speech is computer generated and is more difficult to understand.	Platform does not have text to speech options in other languages.
Metric 4: Integrated Learning		Platform has extensive scaffolding for English Learners including items such as word banks, graphic organizers, visuals, and sentence frames.	Platform has some scaffolding for English Learners including items such as word banks, graphic organizers, visuals, and sentence frames.	Platform does not have scaffolding for English Learners.
Total	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Centering Linguistic Strengths Key Terms

AUTHENTIC TRANSLATION: An authentic translation is a translation that is done by a human translator.

AUTOMATED TRANSLATION: This kind of translation is completed by a computer algorithm that automatically translates from one language to another.

DIGITAL INSTRUCTIONAL MATERIALS: While there is no definition of “digital instructional materials” in Oregon rule or statute, ODE is using the term as a working definition to describe learning platforms that contain scope and sequences on a single subject or on multiple subjects. Digital instructional materials platforms create one central place for students to interact with materials.

MODULARITY: Modularity refers to the ability to adapt, move, or delete digital materials within a platform, allowing educators to customize the curriculum to meet the needs of students.

Centering Linguistic Strengths FAQs

1. Why are linguistic translation tools important in digital instructional materials platforms?

Before the integration of translation tools in digital platforms, e-instructional materials lacked appropriate and equally challenging texts in other languages. Texts were often not the same academic level and subject, which created inequitable opportunities for students. Having translation tools within a platform gives all students a chance to access rigorous materials that are aligned to standards. In addition to translation tools, photo dictionaries, text to speech, speech to text, and appropriate subtitles are also important elements of providing scaffolding for language learners.

2. How can linguistic access tools provide scaffolding?

Many different types of tools that help provide linguistic access have been integrated into digital instructional materials. Translation (both authentic and computer generated), hovering over word definitions, online dictionaries, text-to-photo features, and student word notebooks are just a few examples. These tools can help students develop their own language skills, expand vocabulary, and gain access to higher level content.

3. What are other uses of integrated instructional tools that can center linguistic strengths of students?

AI driven tools that are integrated into digital instructional materials can also, among other things, provide:

- Language Practice: engaging students in conversations with chatbots to practice English in ways that simulate real world interactions.
- Vocabulary Expansion: providing exposure to a wide range of vocabulary and idiomatic expressions through interactive conversations.
- Grammar and Syntax help: offering models of correct grammar and sentence structure.
- Writing Assistance: giving suggestions, corrections, and ideas.
- Cultural Insights: integrating cultural topics, customs, and traditions to help foster a nuanced understanding vocabulary.

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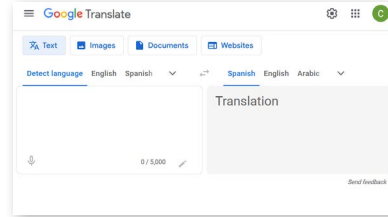
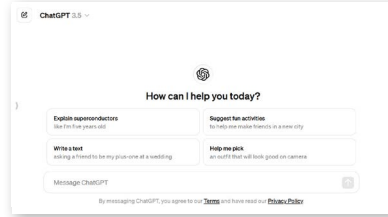
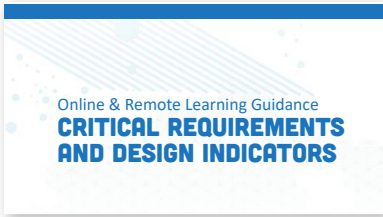
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Resources for Centering Linguistic Strengths with Digital Instructional Materials



▶ [Online and Remote Learning Guidance: Critical Requirements and Design Indicators](#). 1.4 of this document gives specific guidance on instructional materials: “Engaging in a robust [instructional materials adoption process](#) (including, but not limited to digital instructional materials) is integral to ensuring that all students have equitable access to high-quality, culturally responsive- sustaining and differentiated instruction wherein community input is valued and teachers are empowered to use their professional judgment to do what is best for their students.”



▶ [Supporting English Learners through Technology: What Districts and Teachers Say about Digital Learning Resources for English Learners](#). This U.S. Department of Education Report discusses how teachers are using digital instructional materials with multilingual learners and includes a discussion of scaffolds and learning barriers.



▶ [Chat GPT](#) is an advanced natural language processing chatbot powered by generative AI. Educators can leverage ChatGPT language learning in multiple ways. It currently can translate into over 80 languages and can enhance digital instructional materials by making them more accessible and inclusive, adapting to learner skill levels and abilities, translating text into home languages and many geographic dialects, and adapting to individual student interests and cultures.

▶ [Online Translators as a Pedagogical Tool](#). This FLTMAG article provides research and discussion of best uses of online translation tools in a classroom setting.



▶ [Google Translate](#). This AI tool can translate text, speech, images, and web pages between any combination of over 100 languages. The service uses machine learning technology, including artificial neural networks, to automatically provide translations that are accurate and in context. The service is intended to assist people in communicating across language barriers, but it should not be relied upon for professional translation needs, as the quality of the translations may vary and may not always be accurate.



▶ [DeepL Translate](#). This is a machine translation tool which uses deep learning algorithms to translate text from one language to another, providing high-quality translations in various language pairs, such as English, German, French, Spanish, Portuguese, Italian, Dutch, and Russian. The tool aims to produce translations that are more accurate, natural, and fluent than those generated by other machine translation systems.



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MODULARITY IN DIGITAL INSTRUCTIONAL MATERIALS PLATFORMS

What Is Modularity And Why Does It Matter?

Modularity refers to the ability of a teacher to tailor teaching and learning approaches to meet the individual needs of each student, and digital Instructional Materials allow for the creation of these customized learning experiences. By using digital tools teachers can adjust the content, level of difficulty, and format of the materials to meet student needs. Modularity can take many forms, such as providing multiple versions of a lesson or assessment, offering different modes of delivery, allowing different ways for students to demonstrate their learning, or offering support and accommodations for students with disabilities.



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Equity Implications

Digital instructional materials allow for the ability to tailor materials to specific student needs, such as, language tools, text to speech options, fonts and color themes that account for dyslexia, closed captioning, varied content formats, and customized formative assessments.

As an example, research on the use of formative assessment in classrooms has shown that it can have a significant impact on both attitudes toward learning and overall achievement.¹⁵ Using technology in the classroom can facilitate more timely formative assessments, increase engagement, and allow for equal opportunities to participate.¹⁶ Consider adopting digital instructional materials that incorporate Universal Design for Learning (UDL) principles.

Integrated Tools and Options that Allow for Differentiation

The ability to adapt and move digital materials within a platform (modularity) should be a key consideration to support differentiation. When a digital curriculum contains a high degree of modularity, it allows for the easy changing, remixing, and intentional use of specific modules to meet the needs of individual learners.

Some digital instructional materials allow for formative assessments which inform teachers about student assets and skills. This knowledge can allow teachers to modify reading difficulty levels in order to assure that students are operating within their zones of proximal development. As digital instructional materials evolve and integrate Artificial Intelligence (AI) to differentiate for varying levels of learning and increased opportunity for student choice AI should serve as a tool for the teacher but should not supplant the teacher’s role in choosing curricular materials and learning options. For more guidance on Artificial Intelligence, please refer to Oregon Department of Education’s guidance for [Generative Artificial Intelligence \(AI\) in K-12 Classrooms](#).

15 Ozan, Ceyhun. “[The Effects of Formative Assessment on Academic Achievement, Attitudes toward the Lesson, and Self-Regulation Skills](#).” *EDUCATIONAL SCIENCES: THEORY & PRACTICE*, 28 Mar. 2018.

16 Elmahdi, Ismail. [Using Technology for Formative Assessment to Improve Students’ Learning](#). Apr. 2018,

Modularity Rubric

The following rubric can be used to determine whether or not the materials meet, partially meet, or do not meet expectations with regards to differentiation capabilities within digital instructional materials. (A rubric with all criteria can be found on the [Oregon Digital Instructional Materials Rubric webpage](#). The rubric on this page is a fillable template and can be used for individual evaluation of materials.) This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Criterion 1.6 Modularity

Note: The rubric below is a supplement to the [Adoption Criteria for Instructional Materials](#) required by [OAR 581-022-2350 Independent Adoption of Instructional Materials](#). This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Modularity Metrics				
	Score	2 points	1 point	0 points
Metric 1: Level Adjustment Option		Platform allows students to adjust the level of language and/or conceptual difficulty of instructional materials.	Platform allows students minimal adjustments to difficulty and/or provides help tools like definitions or links to explanations.	Platform does not allow the ability to change learning levels and provides limited to no support in the explanation of concepts.
Metric 2: Lessons		Platform allows teachers to easily assign different readings on the same topic to different students.	Platform allows teachers to assign different readings to different students, but the platform was not designed specifically for this.	Platform does not allow teachers to assign different readings on the same topic to different students.
Metric 3: Assessment		Platform automates/ facilitates the creation of multiple assessments.	Platform allows for the manual creation of multiple assessments.	Platform does not allow for the creation of multiple assessments.
Metric 4: Adaptability		Platform allows the teacher to easily add, delete, and move lessons and units.	Platform allows the teacher to delete/ not assign materials but does not allow for the easy adding and moving of lessons on the platform.	Platform is static and does not allow for adding, deleting, or moving lessons and units.
Total	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Differentiation Key Terms

DIGITAL INSTRUCTIONAL MATERIALS: While there is no definition of “digital instructional materials” in Oregon rule or statute, ODE is using the term as a working definition to describe learning platforms that contain scope and sequences on a single subject or on multiple subjects. Digital instructional material platforms create one central place for students to interact with materials.

DIFFERENTIATION: Differentiation is the practice of tailoring teaching and learning approaches to meet the individual needs of each student in classroom activities and on formative and summative assessments.

MODULARITY: Modularity in the context of digital instructional materials platforms refers to the intentional design of digital content into smaller, self-contained units or modules that can be easily combined, rearranged, or reused to create customized learning experiences for individuals, groups, or entire classes.

Differentiating Digital Instructional Materials FAQs

1. How can modularity in digital instructional materials facilitate differentiation?

By breaking down complex topics into smaller, manageable pieces, modular instructional materials (materials that can be easily added, moved, or subtracted from a unit of study) can support student engagement, understanding, and retention of the material. Digital instructional material platforms that have a modular format allow educators to remix the digital curriculum to meet their course objectives. Moreover, when digital instructional materials come in a modular format, they allow the teacher to provide the most appropriate materials to individual students.

2. How do I know if a digital instructional material is modular?

In addition to asking the vendor, the real proof is to gain trial access to the digital instructional material platform. After a vendor grants access, look to answer these questions:

- Can lessons be moved, changed, or not assigned?
- When something is changed, does that affect any assessment tools embedded within the platform?
- Is it easy to assign different modules to different students in a way that is clear for students?
- Does the platform contain features that make it easy for teachers in different subject areas to differentiate for all students while holding all students to high standards?

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3. What are the benefits and challenges of automated differentiation?

Differentiating learning opportunities with a rich digital instructional materials platform can help to create a more inclusive learning environment by providing students with the support and scaffolding they need to succeed. Engaging with instructional materials at the appropriate level can help ensure that students are working within their zone of proximal development as students can access concepts in a manner that is appropriate to their individual learning needs. Accessing challenging content in different ways can increase collaboration opportunities and create a more positive learning environment. Additionally, it is important that students have access to grade level materials with scaffolding as needed. Communicating high expectations alongside high levels of support for all students is a foundational piece of an inclusive classroom culture. Differentiation within a classroom can occur in many different ways (questioning strategies, student choice, multi-tiered assessments, groupings, etc.), and a digital instructional materials platform can be an important tool that allows all students to access challenging and appropriate content.

Working through these questions on a sample lesson can give additional information on how the platform supports differentiated instruction.

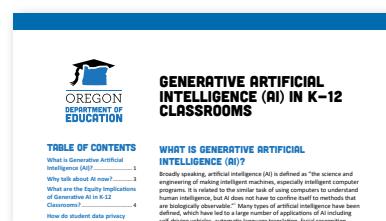
Resources for Differentiation with Digital Instructional Materials



▶ [Differentiated Instruction Unit and Lesson Planning Tool: Guidelines for Use.](#) This ODE provided tool is a practical guide for assisting in focused conversations around differentiation. Although it is meant to be used by mentors and new teachers, it can be appropriate for teachers at any time in their career.



▶ [Teacher Digital Learning Guide.](#) This guide from the U.S. Department of Education's Office of Educational Technology provides insights on how edtech tools personalize learning and empower students.



▶ [Generative Artificial Intelligence \(AI\) in K-12 Classrooms.](#) This ODE guidance document discusses equity and student data privacy implications as well as potential uses of AI in classrooms.



▶ [Adapting Reading Comprehension Instruction to Virtual Learning.](#) This resource from Edutopia examines how technology in virtual settings can be used to promote reading skills.



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STUDENT DATA PRIVACY IN DIGITAL INSTRUCTIONAL MATERIALS PLATFORMS

What is Student Data Privacy and Why Does It Matter?

As schools and classrooms continue to evolve with their use of digital instruction and tools, student data privacy takes on added importance. Digital instructional materials platforms, like other educational technology tools, often collect and store a range of personal data about students including names, contact information, academic performance, and behavioral data. Schools are required to protect the personal information of students from being collected, used, or shared without consent.

When this information is compromised, it can have both short-term and long-term consequences. For example, compromising student data can lead to unsolicited advertising of students, identity theft, financial fraud, and cyberbullying. It also opens up schools and districts to legal consequences including lawsuits and loss of funding. Student data privacy should be taken seriously when working with digital curriculum vendors, especially for students but also for the well-being of the educational institution.



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Photo courtesy of Portland Public Schools

Digital Instructional Materials Toolkit | www.oregon.gov/ode

Key Policies

When integrating digital instructional materials and other educational technology into a school's digital environment, it is helpful to have a deep understanding of federal and state policies relating to student data privacy. This includes the [Family Education Rights and Privacy Act \(FERPA\)](#), the [Children's Online Privacy and Protection Act \(COPPA\)](#), and [Oregon Student Information Protection Act \(OSIPA\)](#).

- The [Family Education Rights and Privacy Act \(FERPA\)](#) was put into law in 1974, and was designed to protect the privacy of student educational records. FERPA was designed at a time when all curriculum was in paper form, and few could have imagined the impacts on privacy created by the internet and digital instruction. The U.S. Department of Education, [Student Privacy Policy Office](#) provides guidance and training through the Privacy Technical Assistance Center to address today's challenges including [Working with Online Educational Service Providers and Applications](#).
- The [Children's Online Privacy and Protection Act \(COPPA\)](#) went into effect in the year 2000 and provided more requirements on digital curriculum providers - specifically when students are under the age of 13. Since then, the world of instructional technology has significantly changed and continues to evolve. At the state level, Oregon provided further clarification on student data privacy in 2013 with the Oregon Student Information Protection Act (OSIPA).
- The [Oregon Student Information Protection Act \(OSIPA\)](#) specifically includes prohibitions such as:
 - Disclosing any covered information provided by the operator to subsequent third parties, except in furtherance of kindergarten through grade 12 school purposes of the site;
 - Engaging in targeted advertising on the operator's site, service, or application; and
 - Selling a student's information, including covered information.

Equity Implications

Implementing a strong student data privacy policy protects students from harms related to the unauthorized collection and sharing of personal information. Moreover, students and families who are not confident in a district's student data privacy protections may be less likely to participate in online learning, thus creating wider opportunity gaps. It is helpful to create a clear student data privacy policy specific to the adoption of digital instructional materials at the beginning of the process to ensure equitable participation and access for all students.

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Starting and Building a Student Data Privacy Policy

The use of technology in education has made it easier to collect, store, and share large amounts of data about students, and vendors may not have a strong understanding of Oregon’s policies that differ from other states. Schools and districts therefore have several responsibilities in addressing student data privacy.

- 1. Self Assessment and Development of a Student Data Privacy Framework:** While some districts have student data privacy frameworks in place, engaging in a student data privacy self evaluation is a helpful step in ensuring that there is alignment with federal and state policy. The Consortium for School Networking (CoSN) developed a [helpful rubric](#) that can be used to assess your organization’s student data privacy health. Getting an overall view of how your organization addresses student data privacy can provide insight into approaching student data privacy challenges embedded within Digital Instructional Material platforms.
- 2. Examination of any artificial intelligence tools that are integrated into digital instructional materials:** Artificial Intelligence tools are being integrated into DIM platforms at an increasing rate and these tools have implications for student data privacy. The Oregon Department of Education published guidance on [Generative Artificial Intelligence \(AI\) in K-12 Classrooms](#) which includes specific advice regarding AI policies: “When developing district policies, it is essential to ensure that they are not in violation of COPPA or OSIPA. All schools and districts engaging with AI technologies (or any technology broadly) should regularly review the company’s usage and privacy policies to ensure that they are not in violation of COPPA or OSIPA.” In addition, consider how AI platforms like ChatGPT store user questions and prompts on their servers where they can be used to answer other prompts to their platform.
- 3. Examination of Vendor Contracts:** Within the adoption process, student data privacy comes into direct focus in contractual agreements. Examine vendor contracts regarding student data privacy before procurement (check FAQ’s below). Third-party curriculum providers present a cybersecurity concern, so networking with your organization’s IT professionals at the beginning of the adoption process is highly recommended. Vendors might also include age limitations for certain materials which might not be noted in the standard student data privacy contract. Closely examine the contracts in addition to including IT staff when having conversations with vendors.

Quick Look-Fors

- Does the vendor have any specific written guarantees regarding student data privacy protection and how they might use student data?
- Has the vendor signed the [Student Privacy Pledge](#)?
- Does your school or district participate in Oregon’s [Student Data Privacy Consortium](#)?
- Does any other district in Oregon have a National Data Privacy Agreement (NPDA) with the vendor? Look at the [Oregon district database](#) to find out.
- Is the vendor committed to notifying districts when their software and/or student data privacy policies change, and what is your district’s capacity for reviewing these policies as they change?

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Internal Student Data Privacy Audit Rubric

Use the following rubric to determine whether or not the materials meet, partially meet, or do not meet the expectations with regards to student data privacy requirements. (A rubric with all criteria can be found on the [Oregon Multi-Subject Digital Instructional Materials Rubric document](#). The rubric on this page is a fillable PDF and can be used for self-evaluation of materials.) This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

Criterion 1.7 Student Data Privacy

Note: The rubric below is a supplement to the [Adoption Criteria for Instructional Materials](#) required by [OAR 581-022-2350 Independent Adoption of Instructional Materials](#). This rubric should be used as a supplemental resource to the instructional materials adoption process and is not a replacement for criteria established by the State Board of Education.

	Score	2 points	1 point	0 points
Metric 1: Sign Up/ Sign In Rostering of student data into curriculum platform from the district's student information system		Student does not require the creation of an external account or additional login, such that no personal user information is collected and shared.	Either instructors are the only users required to provide personal information to set up an account; or the digital curriculum platform has been vetted through appropriate channels to ensure strict adherence to local, institutional, or personal policies/ standards for protecting the collection and use of student personal data by a third party group.	Teachers and students must provide personal information to a third party in creating an account, and there is some question or concern of the adherence to local, institutional, or personal policies/ standards for protecting the collection and use of such data by the third party group.
Metric 2: Data Privacy and Ownership Student's ability to save their own information and independently decide how and when to share it		Students maintain ownership and copyright of their intellectual property/ data; Students over 13 can keep data private and decide if / how data are to be shared.	Students maintain ownership and copyright of their intellectual property/ data; data are shared publicly and cannot be made private.	Students forfeit ownership and copyright of data; data are shared publicly and cannot be made private; or no details provided.
Metric 3: Student Data and sharing Saving student-created data for their own use		Students can archive, save, or import and export content or activity data in a variety of formats.	There are limitations to archiving, saving, or importing/ exporting content or activity data.	Content and activity data cannot be archived, saved, or imported/exported.
Total	___/6			

Meets Expectations (5-6 points)

Partially Meets Expectations (4 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Student Data Privacy Key Terms

STUDENT DATA: Student data is a broad descriptor which includes student-specific information. Common data fields are: first and last name; home address; telephone number; electronic mail address; discipline records; test results; special education data; grades; evaluations; biometric information; disabilities; socioeconomic information; text messages; search activity; photographs; voice recordings; and geolocation information. Some student data are considered directory information and not subject to student data privacy laws and rules.

DIGITAL INSTRUCTIONAL MATERIALS: While there is no definition of “digital instructional materials” in Oregon rule or statute, ODE is using the term as a working definition to describe learning platforms that contain scope and sequences on a single subject or on multiple subjects. Digital instructional material platforms create one central place for students to interact with materials.

The U.S. Department of Education also publishes a comprehensive [Protecting Student Privacy Glossary](#) which includes terms related to student data privacy outside of digital instructional materials.

Student Data Privacy FAQs

1. Why should a school or district prioritize student data privacy when adopting digital instructional materials?

Ensuring student data privacy is the law: [Family Educational Rights and Privacy Act \(FERPA\)](#), [Children's Online Privacy Protection Act \(COPPA\)](#), and [Oregon Student Information Protection Act \(OSIPA\)](#). Student data and its use in digital instructional materials must be handled with critical attention. Although a vendor might have high quality content, if student data privacy is not assured, then the safety of students is being put at risk. As mentioned above, breaches in student data can lead to cyberbullying, illegal advertising, and long term financial risk. Generally speaking, classroom educators should follow their district's IT policies before using any curricular materials that are asking for students to provide personal information.

2. What are some basic indicators that a vendor is providing appropriate protections relating to student data privacy?

First, check to see if the curriculum provider has taken the [Student Privacy Pledge](#). There are currently over 180 educational technology companies who have taken the pledge and shared their privacy policies. By signing the pledge, they are guaranteeing that they meet student data privacy standards with respect to how they handle student information. This is not the only way to determine if a vendor is committed to student data privacy. Reviewing contracts, reaching out to vendors and asking questions, and reviewing any external reviews and evaluations can be helpful additional strategies. See CoSN's section on *Security Questions to Ask of an Online Service Provider* found in their [Student Data Privacy Toolkit](#).

3. How can I tell where an organization stands with respect to data privacy?

Over 44 Oregon School Districts are participating in the [Student Data Privacy Consortium](#). Check the [Oregon Student Privacy Alliance](#) website to see if your organization is participating. If your organization is not a member, consider joining, as membership allows organizations to leverage the consortium to work for their organization's benefit. Membership in the alliance is free, as this membership cost is currently being paid for by the [Association for Computer Professionals in Education \(ACPE\)](#) for all Oregon districts.

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4. Is there an example of student data privacy contractual language for reference?

The [National Data Privacy Agreement](#) from the [Student Data Privacy Consortium](#) provides model contract language for districts to use in their negotiations with digital curriculum materials providers. Comparing this agreement language to the language in your own contracts with vendors is a good way to test the strength of your data privacy health.

Resources for Evaluating for Student Data Privacy



▶ [K-12 Community Vendor Assessment Tool](#). This tool provided by the Consortium for School Networking (CoSN) is a questionnaire designed specifically for K-12 districts and ESDs in order to assess vendor risk. Its central goal is to evaluate the cybersecurity and data privacy policies of vendors.



▶ [Protecting Student Data in a Digital World](#). This report from McKinsey and Company outlines the concerns of parents and educators regarding student data and also looks at some of the reasons that data are shared. It advocates for transparency and earning the trust of all of those involved.



▶ [Oregon Department of Education's Student Data Privacy Page](#). Oregon Department of Education has assembled a collection of helpful resources including guides for parents and students.



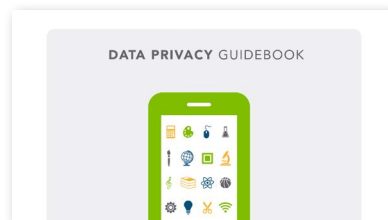
▶ [Student Data Privacy Fundamentals](#). This resource provided by the Consortium for School Networking (CoSN) provides frameworks for student data privacy self assessments, creating a trusted learning environment, and a separate student data privacy toolkit that covers a broad spectrum of challenges in addition to student data privacy in digital instructional materials.



▶ [U.S. Department of Education's Privacy Technical Assistance Center](#). This resource includes [online training modules](#), [videos](#), and [webinars](#) addressing student data privacy challenges.



▶ [Protecting Student Privacy While Using Online Educational Services: Model Terms of Service](#). This tool from the U.S. Department of Education provides a helpful checklist for evaluating terms of service agreements to ensure that student data will be handled safely.



▶ [California Data Privacy Handbook](#). This collaborative project between the California Education Technology Professionals Association (CETPA), the California County Superintendents Educational Services Association (CCSESA) and Fagen Friedman & Fulfrost provides sample policies, compliance checklists, and addendums relating specifically to school districts.



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RESOURCES

Helpful ODE Resources

- ▶ [Accessible Instructional Materials](#)
- ▶ [Adoption Criteria for Instructional Materials by content area](#)
- ▶ [Adopted Instructional Materials with timelines](#)
- ▶ [Developing Policy and Protocols for the use of Generative AI in K-12 Classrooms](#)
- ▶ [Digital Instructional Materials: Requirements and Recommendations](#)
- ▶ [Digital Learning Instructional Design & Pedagogical Considerations](#)
- ▶ [Division 22 Standards and Assurance of Compliance](#)
- ▶ [Education Equity Stance](#)
- ▶ [Generative Artificial Intelligence \(AI\) in K-12 Classrooms](#)
- ▶ [Instructional Materials Oregon Administrative Rules \(OAR\) and Oregon Revised Statutes \(ORS\)](#)
- ▶ [Instructional Materials Toolkit](#)
- ▶ [Key Components of Digital Learning: A Starting Point for Design, Dialogue and Implementation](#)
- ▶ [Online Tools for Schools: Guidance and Considerations](#)
- ▶ [Oregon Accessible Educational Materials Group on the Oregon Open Learning Hub](#)
- ▶ [Student Records and Privacy](#)

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The rubrics shared in this appendix should be used as supplemental resources to the instructional materials adoption process and are not a replacement for criteria established by the State Board of Education.

Criterion 1.1. Accessibility

Accessibility Metrics				
	Score	2 points	1 point	0 points
Metric 1: Accessibility standards		Materials meet accessibility guidelines (i.e. local accessibility legislation and/or W3C WCAG 2.0 AA standards).	Materials have some limited capacity to meet accessibility guidelines.	Materials fail to meet accessibility guidelines or no information of compliance has been made available for the tool.
Metric 2: Student participation		Materials are designed to address the needs of diverse users, their various literacies, and capabilities, thereby widening opportunities for participation in learning.	Materials are somewhat limited in capacity to address the needs of diverse users, their various literacies, and capabilities.	Materials are restrictive in meeting the diversity of needs reflective in the student body. The tool likely restricts some learners from fully participating.
Metric 3: Cost of Use		All aspects of the digital materials can be used free of charge.	Limited aspects of the digital materials can be used for free with other elements requiring payment of a fee, membership, or subscription.	Use of the tool requires a fee, membership, or subscription.
Metric 4: Independently Evaluated		Materials have been independently evaluated by a third party for accessibility, and complete evaluation is available. An ACR has been completed.	Materials have been evaluated by accessibility experts within the vendor's organization. An ACR has been completed.	Materials have not been independently evaluated. The vendor may have evaluated materials for accessibility, but no ACR has been filed.
Total	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Criterion 1.2 Adaptive Learning

Adaptive Learning Metrics				
	Score	2 points	1 point	0 points
Metric 1: Pedagogy		Vendor provides a clear explanation of how educators can use adaptive learning in meaningful ways as part of an integrated learning environment.	Vendor provides an explanation of how educators can use adaptive learning, although some descriptions might not be aligned with best practice.	Provider does not address or minimally addresses how educators can use adaptive learning within the overall context of teaching and learning.
Metric 2: Transparency		Vendor shares the assumptions about how the materials are being used to drive instruction.	Vendor shares assumptions in a general sense with an explanation of how they drive instruction but are not willing to share the algorithms.	Vendor does not share algorithms or assumptions. Algorithms are proprietary and/or the vendor cannot clearly explain how they are being used.
Metric 3: Flexibility		Adaptive learning features can meet the needs of all students and engage students in meaningful ways and allow for teacher agency.	Adaptive learning features meet the needs of most students, although engagement is only sometimes meaningful. Features allow for some teacher agency.	Adaptive learning features meet the needs of only some students. Adaptive tools allow for little to no teacher flexibility in how they are adapted for use.
Metric 4: Bias		Vendor has a documented history of actively addressing bias and has a clear process for adapting algorithms and content.	Vendor has a documented history of addressing bias but does not have a clear process for adapting algorithms and content.	Vendor does not have a documented history of addressing bias and/or has no plans for adapting and changing biased algorithms and content.
Total Score	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Criterion 1.3 Culturally Responsive Materials

Culturally Responsive Metrics				
	Score	2 points	1 point	0 points
Metric 1: Thematic Representation		All students can see themselves in terms of different identity markers in the digital curriculum and have opportunities to learn from a variety of perspectives.	Most students can see themselves in the digital curriculum. Students occasionally get a chance to explore multiple points of view and perspectives.	Many students cannot see themselves in the digital curriculum and rarely have an opportunity to explore multiple viewpoints and/or hear multiple voices.
Metric 2: Visual Representation		Photos and videos provide diverse and non-stereotypical images.	Photos and videos provide somewhat diverse and non-stereotypical images.	Photos and videos lack diversity and/or provide stereotypical images.
Metric 3: Authorship		Authors come from a wide variety of backgrounds and and/or non dominant cultural perspectives.	Authors come from several different backgrounds but scope is somewhat limited.	Authors only come from dominant cultural perspectives.
Total Score	____/6			

Meets Expectations (6 points)

Partially Meets Expectations (4-5 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Criterion 1.4 Interoperability

Interoperability Metrics				
	Score	2 points	1 point	0 points
Metric 1: Integration Integration/ Embedding within a Learning Management System (LMS)		Digital materials can be embedded as an object via HTML or fully integrated (e.g. LTI compliant tools) into an LMS while maintaining full functionality of the tool.	Digital materials can be embedded within an LMS, perhaps with limited functionality, but cannot be fully integrated.	Digital materials can only be accessed in an LMS through a hyperlink or static representations of the materials (e.g. file export), rather than a functional version of the tool itself.
Metric 2: Operating Systems Desktop / Laptop Operating Systems		Students can effectively utilize the tool with any standard, up-to-date operating system.	Students may encounter limited or altered functionality depending on the up-to-date operating system being used.	Students are limited to using the tool with one specific, up-to-date operating system.
Metric 3: Compatibility Browser compatibility		Students can effectively utilize the tool with any standard, up-to-date browser.	Students may encounter limited or altered functionality depending on the up-to-date browser being used.	Students are limited to using the tool through one specific browser.
Metric 4: Rostering		Allows for seamless integration of student information from the Student Information System (SIS).	Allows for integration of student information from the SIS with minor challenges.	Does not allow for seamless integration of student information from the SIS.
Metric 5: Single Sign-On (SSO)		Allows for easy integration of SSO by IT Department.	Allows for integration of a SSO with extra efforts and tools from IT Department.	Does not allow for SSO. Students will have to sign on separately to the platform.
Metric 6: Grade PassBacks		<i>If</i> digital materials have a grading component where grading is done on the platform, grades can be transferred back to the LMS and/or the SIS.	<i>If</i> digital materials have a grading component where grading is done on the platform, only some components (e.g. points but no qualitative comments) can be passed back.	<i>If</i> digital materials have a grading component where grading is done on the platform, there is limited to no ability to transfer grades and feedback from the digital materials platform to an LMS or SIS.
Total	___ / 12			

Meets Expectations (11-12 points)

Partially Meets Expectations (9-10 points)

Does Not Meet Expectations (<9 points OR a 0 is given for any required metric)

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Criterion 1.5 Centering Linguistic Strengths

Centering Linguistic Strengths Metrics				
	Score	2 points	1 point	0 points
Metric 1: Breadth of Options		There is a wide variety of available language choices. Languages available meet the needs of all/nearly all learners in the district.	There is an adequate variety of available language choices. Languages available meet the needs of some/most learners in the district.	There are few to no translation choices. If available, options do not meet the needs of learners in the district.
Metric 2: Translation Source		All texts are available for translation. Some have been translated by human translators.	Majority of texts can be translated within the platform. Most/all of these translations are computer generated.	Some/all texts are not available for translation.
Metric 3: Text to Speech		Platform has text to speech options in world languages. Accents and intonations are authentic.	Platform has text to speech options in target languages but speech is computer generated and is more difficult to understand.	Platform does not have text to speech options in other languages.
Metric 4: Integrated Learning		Platform has extensive scaffolding for English Learners including items such as word banks, graphic organizers, visuals, and sentence frames.	Platform has some scaffolding for English Learners including items such as word banks, graphic organizers, visuals, and sentence frames.	Platform does not have scaffolding for English Learners.
Total	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Criterion 1.6 Modularity

Modularity Metrics				
	Score	2 points	1 point	0 points
Metric 1: Level Adjustment option		Platform allows students to adjust the level of language and/or conceptual difficulty of instructional materials.	Platform allows students minimal adjustments to difficulty and/or provides helpful tools like definitions or links to explanations.	Platform does not allow the ability to change learning levels and provides limited to no support in the explanation of concepts.
Metric 2: Lessons		Platform allows teachers to easily assign different readings on the same topic to different students.	Platform allows teachers to assign different readings to different students, but the platform was not designed specifically for this.	Platform does not allow teachers to assign different readings on the same topic to different students.
Metric 3: Assessment		Platform automates/facilitates the creation of multiple assessments.	Platform allows for the manual creation of multiple assessments.	Platform does not allow for the creation of multiple assessments.
Metric 4: Adaptability		Platform allows the teacher to easily add, delete, and move lessons and units.	Platform allows the teacher to delete/not assign materials but does not allow for the easy adding and moving of lessons on the platform.	Platform is static and does not allow for adding, deleting, or moving lessons and units.
Total	___/8			

Meets Expectations (7-8 points)

Partially Meets Expectations (5-6 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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Criterion 1.7 Student Data Privacy

	Score	2 points	1 point	0 points
Metric 1: Sign Up/ Sign In Rostering of student data into curriculum platform from the district's student information system		Student does not require the creation of an external account or additional login, such that no personal user information is collected and shared.	Either instructors are the only users required to provide personal information to set up an account; or the digital curriculum platform has been vetted through appropriate channels to ensure strict adherence to local, institutional, or personal policies/ standards for protecting the collection and use of student personal data by a third party group.	Teachers and students must provide personal information to a third party in creating an account, and there is some question or concern of the adherence to local, institutional, or personal policies/ standards for protecting the collection and use of such data by the third party group.
Metric 2: Data Privacy and Ownership Student's ability to save their own information and independently decide how and when to share it		Students maintain ownership and copyright of their intellectual property/ data; Students over 13 can keep data private and decide if / how data are to be shared.	Students maintain ownership and copyright of their intellectual property/ data; data are shared publicly and cannot be made private.	Students forfeit ownership and copyright of data; data are shared publicly and cannot be made private; or no details provided.
Metric 3: Student Data and sharing Saving student-created data for their own use		Students can archive, save, or import and export content or activity data in a variety of formats.	There are limitations to archiving, saving, or importing/ exporting content or activity data.	Content and activity data cannot be archived, saved, or imported/exported.
Total	___/6			

Meets Expectations (5-6 points)

Partially Meets Expectations (4 points)

Does Not Meet Expectations (<4 points OR a 0 is given for any required metric)

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