ISTE Seal Framework

Essential Indicators of Quality EdTech

Table of Contents

Introduction 1

Who Is This Guide For, and What Does It Do? 2

The Framework 3

- Dimension 1 5
- Dimension 2 8
- Dimension 3 11
- Dimension 4 13
- Dimension 5 15

Methodology 17

Glossary 19

References 23

Introduction

The **ISTE Seal Framework** is a research-based resource designed to help educators and edtech decision-makers identify well-built educational technology (edtech) products – specifically focused on **technical and pedagogical usability** – that support effective teaching and learning.

Whether you are a district leader selecting products for your schools, a curriculum coordinator evaluating tools for classroom use, or a teacher or parent just interested in finding the right product for the right learner, this guide provides the criteria and structure to evaluate edtech products with rigor and confidence.

Who Is This Guide For, and What Does It Do?

Edtech evaluation looks different depending on who you are and what you need from a product. This guide is designed to serve multiple audiences:

- **Instructional and curriculum leaders** who want to be sure that the products their schools use will improve both teaching and learning
- **Edtech decision-makers and administrators** who want to ensure the products they recommend meet the quality standards required by their district or state
- **Teachers** who want to know if a product will work seamlessly in their classroom and effectively support instruction
- **Product providers** who want to ensure their product is meeting the needs of their diverse users

Regardless of your role, the framework offers a common language and shared set of criteria for evaluating what makes an edtech product well-built and usable. The criteria are firmly grounded in the science of learning and also the art of user experience design. *Together, this framework covers the waterfront of edtech usability, including technical, pedagogical, and social components.* While providing a deep look at usability specifically, it must be noted that the areas the framework touches, such as Accessibility, Interoperability, and Data Privacy, are addressed in greater depth by organizations that specialize in those areas (e.g., CAST, 1EdTech, CoSN, etc.).

The Framework

The framework specifies five dimensions of product usability:

User Interface and Experience: The design of the product interface and user experience helps teachers quickly and reliably achieve instructional goals.

Learning Design: The product is designed so that learning episodes, including content and activities, align with research-based best practices rooted in the learning sciences.

Digital Pedagogy: The product is designed to effectively support the development of skills, capacities, and knowledge students need to thrive in the world today.

Accessibility and Relevance: The product is designed to help teachers provide learning experiences that are relevant to students from many cultures, backgrounds, and abilities, and meets current guidelines around accessibility.

Assessment and Data: The product uses formative assessments to generate data that inform teachers about student knowledge and skill gaps, and provide students with feedback that is specific, actionable, and constructive.

The Framework Cont.

Each dimension includes a definition, indicators, and look-fors.

This structure breaks down each broad dimension of usability into specific indicators, and further into observable features and examples.

- **Definition:** An explanation of what the dimension is.
- **Indicators:** Features of the product related to the dimension that can be rated by teachers, district stakeholders, and product evaluators.
    - ***Indicator label:*** The title of the indicator.
    - ***Indicator definition:*** The definition of the indicator. This describes the general quality that a product evaluator would look for, such as if the login process is smooth and easy.
    - ***Look-fors:*** Observable examples of indicators. This dissects the indicator into discrete, specific, empirical features. In general, these look-fors cite just a single feature and are as "objective" as possible.

Applying the Framework varies by reviewer role and what they need from a product. The perspectives below reflect how students, teachers, and providers might approach product evaluation through the lens of the Framework:

Student Voice: "Can I quickly find what I need to complete my learning activities and meet my goals? Does it help me think deeply and explore real-world problems? Do I see myself in the content, and if I have a disability or learning difference, can I access everything in ways that work for me? Does the product show my progress and help me understand what to work on next?"

Teacher Voice: "Is everything I need a click or two away? Does it help my students reach their learning goals? Is it grounded in research on instructional best practices? Does it go beyond drill and practice to make student thinking visible? Does it represent the diverse backgrounds of my students and offer useful/meaningful accessibility features? Does it give me the data I need to guide my next instructional steps?"

Provider Voice: "Does the product align well with how teachers work? Did we design features that align with research on how people learn? Does our product encourage students to explore authentic problems and support creative projects? Does it authentically represent the full diversity of students, across culture, ability, background, and identity? Does it help teachers understand what their students know, and provide students with timely feedback on their progress?"

DIMENSION 1:
User Interface and Experience

The design of the product interface and user experience helps teachers quickly and reliably achieve instructional goals. This dimension includes features related to interface design, navigation, control over actions, and general usability.

1.1 VALUE PROPOSITION

The product clearly demonstrates how it will improve the teaching workflow and help meet instructional needs efficiently and effectively.

a. Obvious benefit in efficiency or effectiveness in the everyday work of teachers.

b. Clear statement or demonstration of the product's educational goals and relevance for intended audiences (e.g., various grades, learning differences, etc.).

c. Product webpage clearly outlines functionality differences with free, paid, and/or premium licenses.

d. Clear explanation of how the tool uses AI, including the functionality and value of AI-powered features

1.2 LOGIN

The product provides a login process for teachers and students that is easy to find and complete.

a. The login page is easy to find (e.g., from the home page or via a short link).

b. The login screen features a clean user interface and obvious login actions.

c. Single Sign-On (SSO) compatibility is available through third-party platforms (e.g., Clever, Classlink) or direct to relevant SIS or LMS platforms.

d. Multi-factor authentication security is available.

1.3 INTERFACE DESIGN

The product user interface organizes all elements (e.g., buttons, links, etc.) in a way that makes their arrangement intuitive to users, and elements are consistent, actionable, and add value to the experience.

a. A clean user interface, free of distraction and clutter, including advertisements.

b. User interface buttons are sized appropriately and placed in a way that makes sense for intended users.

c. Important functions, such as buttons, menus, and other "call to action" mechanisms, are prominently displayed and feature a clear design (e.g., high contrast).

d. Minor features are hidden or reduced so that they don't distract from the most important ones.

1.4 DISCOVERABILITY

The product makes it easy for teachers and other users to find, preview, and filter content and discover product features.

a. Users can quickly find content or functions they're looking for (can include markers or sections in videos).

b. Search functionality is easy to find and works well for product users based on their needs.

c. The product includes embedded filtering functionality for browsing content and/or product features.

d. When educators are onboarded to the product, minimal time and effort are required to start using basic functionality.

1.5 NAVIGATION

The product makes it easy for users to understand their location within the product, quickly find what they need, and easily recover from errors.

a. The navigation menu is always easy to find with options that describe key product functions or areas.

b. Frequently used product functionality is one to three clicks away.

c. "Breadcrumb trails" (i.e., a trail of links at the top of a window or page) are visible.

d. There is an obvious "undo" process for error recovery.

e. Similar actions work the same way throughout the product, making it easy to transfer knowledge about one type of task to a new one.

1.6 STUDENT VIEW

The product makes it easy for teachers to see, as needed, exactly what students see when they engage with the product.

a. There is an ability to easily switch between views, such as teacher and student.

b. There is an ability to update or change content selections and then immediately understand the impact for a student user.

1.7 CUSTOMIZABLE INTERFACE

The product provides a collection of adjustable settings for teachers to customize controls and features.

a. Dashboards and templates are customizable.

b. Spacious and compact modes are available.

c. There is an arrangement by concept section (e.g., unit), time (e.g., calendar), or other parameters.

d. Teachers can turn select features - including AI functionality - on and off for themselves and/or students.

1.8 SUPPORT

The product provides teachers easy access to technical support, including help resources and tutorials, customer service, and embedded help functions as appropriate.

a. Technical support (including help videos) is easy to find inside the product and/or through the product website.

b. Support documentation and resources are broken up into small, clearly labeled chunks.

c. The support library offers search and/or filter functionality.

d. There is on-demand (e.g., submit a ticket) or live chat support for teachers or other users.

1.9 INTEROPERABILITY

The product clearly describes its interoperability and how it integrates with other products in use at the school and district, including account syncs and data sharing.

a. The product provides a clear list of other products it's already interoperable with on its website (e.g., an "Integrations" page) or inside the product.

b. An interoperability report specifies what types of data port to/from other apps.

c. The product page shows what select (at least one) integrations look like in practice.

d. A standards-based interoperability certification, such as through 1EdTech, Ed-Fi, SIFF, or Project Unicorn, is displayed.

1.10 DATA PRIVACY & SAFETY

The product provider clearly documents its data privacy priorities and practices, explaining them in language that is easy to understand.

a. The product website publishes a clear statement that is easy to find and understand on how it stores and uses student data.

b. Data privacy certification and/or clear documentation of how it meets various data privacy requirements (e.g., WCAG, GDPR, COPPA, FERPA).

c. Guardrails that alert teachers or leaders to potentially harmful user discussion (including peer conversation or AI-based interactions) or behavior.

d. The product clearly identifies when and how AI is powering features that use "memory" of student data, such as adaptive content.

e. By default, student data are not shared with the company or third parties to train or improve any product or model — including, but not limited to, AI models.

DIMENSION 2:
Learning Design

The product is designed so that learning episodes, including content and activities, are aligned with research-based best practices, including those rooted in the learning sciences.

2.1 OUTCOMES & ALIGNMENT

The product clearly demonstrates alignment of learning outcomes with instructional standards, content, and activities for both teachers and students.

a. Learning outcomes are regularly displayed at the start of and/or throughout learning episodes.

b. Connections between learning outcomes, content, and activities are explicit in learning episodes and lessons.

c. Teachers can easily align learning activities and outcomes with relevant curriculum standards or established educational frameworks.

2.2 STUDENT GOALS

The product helps students set personal learning goals and reflect on progress toward those goals or product-provided learning outcomes.

a. There are regular opportunities to select or create learning goals and reflect upon their progress towards those goals.

b. There are activities or features that guide students in aligning personal learning goals with learning outcomes cited by the product.

c. There are activities or features that guide students in extending their learning goals to new topics and deeper levels.

2.3 COGNITIVE LOAD

The product presents content and activities within a lesson or page in chunks (pieces, bites, modules, etc.) that are appropriate for the students and the topic.

a. Content and/or activities are appropriate in length and depth for the age and ability of the product's intended students.

b. In general, no presence of long "run-on" pages, sections, or videos that could effectively be chunked.

c. Content and activities are structured in a way that encourages developmentally appropriate productive struggle for students.

2.4 CONTENT QUALITY

The product is intentional with its choice of content and medium (e.g., text, pictures, video) to achieve learning goals, so that multiple content types effectively illustrate key learning takeaways.

a. Multimedia content reinforces and does not distract from key learning takeaways in a way that is suitable for the target (student) audience.

b. Visual elements complement text or narration to convey deeper or better understandings of topics.

c. Narrated videos do not simply restate on-page text (screen reader technology and closed captioning excluded).

d. Learning content, including that produced by AI, if applicable, is accurate and encourages academically sound ways of thinking for students.

2.5 CONTENT ADJACENCE

The product aligns content so that pictures, narration, and other information appear adjacent or close together on pages.

a. Users do not have to navigate away (e.g., scroll or swipe) in order to see pictures/visuals and text that relate to each other.

b. Narration is well-timed so that it complements visual information.

c. Controls for interactive elements (e.g., click-to-hear narration) are prominently placed (e.g., easy to find and use).

2.6 RECALL & REINFORCEMENT

The product regularly requires students to retrieve, recall, reflect, and build upon what they already know through a variety of interactive activities.

a. Content pages regularly include activities that engage learners in assessing their learning (such as a quiz or reflection) before moving too far ahead.

b. It is difficult to just click "next" repeatedly to move through content.

c. Retrieval activities support student engagement and persistence through features such as constructive feedback or personally relevant incentives.

2.7 INSTRUCTIONAL CUSTOMIZATION

The product offers teachers the ability to customize, differentiate, or personalize the flow of content and activities to meet the needs of diverse students.

a. Content is structured so that teachers can easily link or direct to specific lessons or activities.

b. Teachers are able to drag/drop or "mix & match" content and activities if desired.

c. Relevant and helpful suggestions for effective classroom implementation, such as feature or content recommendations, are available.

d. Teachers can modify and use AI-generated content and activities to fit their instructional needs.

2.8 APPLIED EXAMPLES

The product presents a variety of real-world examples that illustrate learning goals and key takeaways.

a. Concepts are consistently illustrated with a variety of concrete examples that illustrate the key instructional takeaways.

b. Contrasting "non-examples" that illustrate what the concept is not (or that illustrate common misconceptions) are present.

2.9 ELABORATIVE REFLECTION

The product includes embedded functionality that encourages students to reflect on information presented.

a. Structured prompts or product features explicitly encourage students to reflect upon content or activities.

b. Product features encourage students to make connections between new knowledge and what they already know.

c. Activities require students to regularly explore conclusions and/or implications of new knowledge learned.

DIMENSION 3:
Digital Pedagogy

The product is designed to support the development of skills, capacities, and knowledge students need to thrive in the world today. This dimension focuses on how technology can support the best possible learning experiences, including social and learning affordances that digital educational products uniquely offer.

3.1 AUTHENTIC LEARNING

The product presents students with authentic problems and requires them to develop related solutions.

a. Learning scenarios cite real-world issues and problems that are relevant to students.

b. Students are tasked to create original works or solutions to authentic problems.

c. Assignments offer students the opportunity to repurpose or remix resources they find.

3.2 SOLUTION DESIGN

The product encourages students to carefully define problems and develop a structured approach to solution design, prototyping, and/or iteration.

a. Activities explicitly cite or include problem definition and deconstruction (i.e., breaking the problem and solution strategy into parts).

b. Select activities feature a structured design process approach that guides students toward strategic solution development.

c. Activities require students to describe their project methodology or process (as appropriate).

d. Product functionality helps students document prototype ideas, development, and tests.

3.3 INFORMATION CURATION

The product's activities require students to curate, evaluate, and use information to complete assessments or projects.

a. Activities require students to find information (either within the app or external to it) and evaluate its perspective (rationale and position).

b. Activities require students to find information and evaluate its credibility and relevance.

c. Guidance assists students in referencing and describing the information they use.

d. Product features or activities help students curate and synthesize information.

3.4 COLLABORATIVE INTERACTION

The product features functionality to support collaboration, including feedback, among learners and between learners and teachers.

a. There is an ability for teachers to provide feedback and solicit student response.

b. There is an ability for students to provide feedback on peers' work.

c. Immediate (real-time) collaboration functionality supports student group work.

d. There is a straightforward ability for users to share work and/or add new collaborators.

e. There is an ability for students to interact with AI agents as collaborators on student work (e.g. review work, assist with research, check thinking)

3.5 DIGITAL IDENTITY

The product provides learning opportunities related to safe and ethical online behavior, intellectual property, and digital identity management.

a. Functionality, content, or assessments related to digital identity and citizenship are provided.

b. Options for sharing data (e.g. products or information from class) are available to teachers and, as appropriate, students.

c. Issues related to online safety (e.g., password management, phishing) and/or etiquette (e.g., cyberbullying) are addressed.

3.6 TRANSFORMATIVE AI POTENTIAL

The product's AI-powered features enable teachers and other stakeholders to accomplish teaching and learning goals more effectively.

a. AI-powered functionality reduces the time or effort required for a previously time-consuming teacher task without sacrificing quality.

b. AI-powered functionality supports teacher creativity in instructional content, pedagogical or behavioral strategy, and/or assessment design.

c. The product integrates AI functionality in ways that meaningfully enhance teaching and learning.

d. The product offers users guidance on where and when their agency can be applied, such as overriding suggestions or adjusting processes.

DIMENSION 4:
Accessibility and Relevance

The product is designed in ways that help teachers provide learning experiences that are relevant to students from many cultures, backgrounds, and abilities, thereby supporting learner motivation and agency. The product meets current accessibility guidelines and supports a positive classroom culture.

4.1 CULTURAL RELEVANCE

The product features content and activities that reflect a diverse range of people and cultures in an affirming, authentic way. A wide variety of students and teachers can see themselves in the product.

a. A wide array of people are portrayed in scenarios that reflect genuine experiences from diverse communities (e.g., family structures, neighborhoods) without relying on stereotypes.

b. People portrayed reflect multiple demographic aspects, including gender, race, ethnicity, ability, orientation, socioeconomic backgrounds, religion, body type, and/or nationality.

c. Content reflects modern real-world situations, events, and problems that are relatable and relevant for students and teachers.

4.2 EMPATHY OPPORTUNITY

The product provides helpful cues to support the development of social skills such as empathy-building and constructive communication.

a. Content and activities encourage students to "put yourself in the shoes" of others.

b. Content and activities facilitate perspective-taking ("windows") and self-reflection ("mirrors") to explore differences.

c. The product generally encourages an asset-based perspective (considering people's differences as strengths) rather than focusing on differences as deficits.

4.3 BASELINE ACCESSIBILITY

The product demonstrates that it meets many of the most important accessibility guidelines – such as the WCAG version approved by the U.S. Department of Education – so that all product content is accessible to a wide range of people, including those with physical, learning, cognitive, or other disabilities.

a. Closed captioning for audio and video (including support videos) is easy to find and can be enabled or disabled.

b. Speed control for audio and video is easy to find and can be enabled or disabled.

c. Text should be spacious, heavily weighted, and clean in design, and text lines should be adequately spaced vertically; sans-serif text preferred.

d. Interactive components (e.g., links, buttons, controls) are accessible with the keyboard alone.

e. Interfaces warn users about or altogether avoid flashing or flickering effects.

f. Product design supports screen reader and text-to-speech functionality (e.g. alternate text for images, simple table design, and clear page structure and actions).

4.4 ADVANCED ACCESSIBILITY

The product demonstrates that it meets advanced accessibility recommendations to serve students and other users with a wide variety of abilities, needs, and disabilities.

a. Product provides integration with assistive technologies and support for augmentative communication (e.g., writing, drawing).

b. Product offers interoperability between curricula and management platforms (e.g., SIS/LMS) to support disability accommodations and special education data needs.

c. Multiple spoken and written languages are embedded in the product and work well.

DIMENSION 5:
Assessment and Data

The product uses formative assessments to generate data that inform teachers about student knowledge and skill gaps, and provide students with specific, actionable, and constructive feedback. As such, it guides teachers' instructional decisions and students' learning journeys.

5.1 ASSESSMENT ALIGNMENT

The product regularly includes assessments that clearly align with learning objectives and content.

a. Formative assessments are embedded throughout learning episodes.

b. "No stakes" diagnostic quizzes are presented at the beginning of sections.

c. Alignment between learning objectives and assessments is clear or explicit.

d. AI-powered functionality appropriately adapts content, format, or difficulty in real time based on student assessment activities and results.

5.2 SUCCESS CRITERIA

The product provides clear success criteria for assessments, whether auto-scored by the product or scored by a teacher.

a. Assessment results are presented alongside criteria for the scores.

b. Criteria are adequately detailed to be informative for a student.

c. Product provides functionality to insulate against academic dishonesty (e.g., plagiarism checks).

5.3 ASSESSMENT FUNCTIONALITY

The product provides a variety of assessment types and formats appropriate for the content and target student population.

a. A variety of assessment type options are available – minimum requirement is multiple choice plus one other type such as drag & drop, flash cards, open response, or image or video submission.

b. Assessment types are a good fit for the subject, topic, or content taught.

c. Product supports the creation and/or customization of high-quality assessment items.

5.4 PERFORMANCE DEMONSTRATION

The product enables students to demonstrate what they have learned in multiple ways.

a. The process for students to submit work is clear.

b. Students are able to submit work in various formats, as is appropriate based on instructional goals and content.

c. Students can view and share what they've submitted (as appropriate).

5.5 FEEDBACK

The product provides students with actionable, real-time feedback about their performance on embedded, auto-scored assessments.

a. Product feedback goes beyond just correct/incorrect, but instead supports productive struggle and deeper learning.

b. Assessments provide feedback to students quickly or immediately.

c. Actionable feedback clearly connects to instructional content or offers recommendations (e.g., other assessments or learning content) to address knowledge gaps.

d. AI-generated feedback feels conversational and is personalized based on student performance.

e. AI-generated feedback is accurate and effectively encourages better understanding of academic concepts.

5.6 PERFORMANCE & ANALYTICS

The product provides data about student use (analytics) and performance (assessment results) that support teachers and administrators in understanding both product engagement and student learning progress.

a. Performance and analytics dashboards are informative and easily configurable for teachers and, as applicable, administrators.

b. Performance and/or analytics results are specific and timely enough to be actionable, informing teachers about their next instructional strategies.

c. Results are easily exportable to spreadsheet format.

d. Results are available in real-time (i.e., immediately).

e. Clear distinction between actual results and AI-generated predictive insights (AI only).

Methodology

Originally developed and validated by ISTE as the Teacher Ready Edtech Evaluation Framework in 2022, the framework evaluates products across five dimensions of usability for teachers and students: User Interface and Experience, Learning Design, Digital Pedagogy, Accessibility and Relevance, and Assessment and Data. That 2022 framework served as the foundation for the ISTE Seal product certification, and, following dozens of Seal reviews since its release, the need to make a clear connection between the framework and the certification has become more acute. Consequently, the refreshed (2026) framework is called the Seal Framework to reflect that alignment.

Since the framework's initial release in 2022, the edtech landscape has shifted considerably. For instance, Artificial Intelligence (AI) has become more widespread, with AI-powered features becoming standard across many products, raising new questions about how those features function, how they use student data, and whether they genuinely improve teaching and learning outcomes. At the same time, field-wide conversations about cultural relevance and accessibility have deepened, and the framework needed to reflect that growth.

Beginning in late 2024, the ISTE Research & Development (R&D) team led the revision of the dimensions, indicators, and look-fors. Building on an in-depth literature review (see References) and extensive user research from the initial development phase, we used a structured process to ensure that the new framework meets the same standards of validity and reliability as the original framework. This process included:

- **Practitioner focus groups:** In early 2025, findings from focus groups with education practitioners and product providers surfaced priorities around AI-powered features and data privacy, expanded accessibility, cultural relevance, student motivation and engagement, and the usability of the framework for a broader range of educators and decision-makers.

- **Accessibility field scan:** In late 2024, exploratory conversations with nonprofits specializing in accessibility and assistive technology improved understandings of emerging developments in K-12 edtech. The insights gained helped shape the expansion and revision of the Framework's Accessibility indicators.

- **AI field scan:** Findings from interviews with AI subject matter experts informed the development of new AI-specific indicators and look-fors across all five dimensions. Key themes included walled-garden data protections, the accuracy of AI-generated content, the personalization of learning pathways and feedback, transparency in AI use, and the principle that AI should augment—rather than replace—the role of teachers and students.

- **Cultural relevance field scan:** Findings from interviews with cultural subject matter experts informed revisions to the Relevance indicators, including key themes around authentic representation and more empirically grounded language, such as what good representation looks like.

Methodology Cont.

- **Market signals exploration:** In 2025, ISTE+ASCD partnered with The Decision Lab to deeply explore the features of what makes for effective edtech market signals, both for edtech providers and edtech buyers. The results of this study revealed areas where the Seal could improve in both content and market awareness.

- **Data privacy clarification:** Several school district technology leaders (e.g., Chief Technology Officers) advised on current issues related to student data privacy and safety, particularly regarding new developments in AI.

- **Product scoring pilot:** Education practitioners tested the revised indicators and look-fors against multiple products to assess the reliability of the framework. Practitioners were provided with a controlled sample of each product to ensure that each participant scored against the exact same criteria and product content.

Glossary

Product usability refers to the degree to which a tool helps a user meet a need or accomplish a task, including achieving a learning objective. In unpacking the framework into indicators and look-fors, you'll find several terms that are defined below. The definitions of these terms come from several fields, including instructional design, user experience design, and the learning sciences. These terms and the framework in general are based on resources found in the references section of this document.

- **Accessibility:** Accessibility is the degree to which a product can be used by people with a wide range of abilities, disabilities, and learning needs. Accessible design, while grounded in disability accommodation, generally benefits all users and aligns with Universal Design for Learning (UDL) principles and Web Content Accessibility Guidelines (WCAG).

- **Activities:** The assessments and/or interactive elements requiring student response and interaction. Distinguished from "content" here, although edtech curriculum products often quickly switch between or intertwine content and activities.

- **Agency:** The capacity of students and teachers to make meaningful choices about their learning and teaching experiences.

- **Artificial Intelligence (AI):** The ability of a computer system to perform tasks that typically require human intelligence, such as recognizing patterns, generating content, making predictions, or adapting to new information.

- **AI-generated:** Refers to content, feedback, or other outputs that have been produced by an artificial intelligence system rather than created directly by a human.

- **AI-powered features:** Product functionality that is driven by artificial intelligence. In edtech products, examples can include personalized learning recommendations, automated feedback, and adaptive assessments.

- **Assistive technology:** An individualized accommodation to help a student address and navigate personal learning obstacles due to a disability. For example, listening to an audiobook leverages a student's auditory skills to bypass possible decoding and visual tracking issues. (Understood.org, 2025)

- **Augmentative communication:** Refers to tools, strategies, or methods that support or replace spoken or written language for individuals who have difficulty communicating verbally. Examples include picture boards, speech-generating devices, and text-to-speech technology.

- **Authentic:** Experiential learning and content based on students' real-world experiences and interests, current issues, and/or real data.

- **Breadcrumb trail:** A navigation tool that allows a user to see where the current page is in relation to the website's hierarchy.

- **Collaboration:** The process by which learners work together to achieve shared goals, exchange perspectives, and build knowledge collectively. In edtech products, collaboration features may include real-time co-editing, peer feedback tools, and shared project spaces that support meaningful interaction between students and teachers.

- **Content:** The information the product provides. Content can be any format or media type, such as text, images, audio, simulation, or video.

- **Digital identity:** How an individual is represented online in the public domain, based on activities, connections, or tagging. Examples include social media posts, photos, public online comments/reviews, and awareness and monitoring of how others are depicting oneself online.

- **Digital citizenship:** Encompasses the rights, responsibilities, and behavioral standards that guide participation in digital environments. Effective digital citizens understand how to engage safely and ethically online, recognize the implications of their digital actions, respect intellectual property, and navigate online interactions, including social media, peer communication, and AI-generated content, with integrity and care.

- **Digital pedagogy:** The use of digital tools in ways aligned to best practices in pedagogy to support student mastery of content knowledge, problem-solving, critical thinking, effective communication, collaboration, and self-direction.

- **Formative assessments:** Low-stakes checks for understanding that help teachers and students monitor learning progress throughout a lesson or unit. Unlike final exams or graded tests, formative assessments are designed to inform instruction and give students actionable feedback on what they know and what they still need to work on.

- **Formative assessment product:** A formative assessment product is an edtech product that helps teachers create, distribute, and review interactive experiences to understand what learners know and don't yet know; often, this is a "quiz."

- **Guardrails:** Product-level safety mechanisms designed to detect, limit, or flag content or interactions that may be harmful to students. In edtech products, guardrails may include filters for inappropriate language, alerts for concerning peer interactions, or limitations on the types of content an AI system can generate or share with students.

- **Interoperability:** The ability of an edtech product to connect and share data with other tools and systems used by a school or district, such as a learning management system (LMS) or student information system (SIS).

- **Learning episode:** A time-based experience where teachers and students work together on the same learning objective. A "lesson" is a common example.

- **Learning sciences:** The learning sciences make up an interdisciplinary field of research with the common goal of studying and understanding how people learn, and how to apply this understanding to the design and evaluation of learning experiences. Key fields include cognitive psychology, educational psychology, human development, linguistics, and social psychology.

- **Multi-factor authentication (MFA):** A security feature that requires users to verify their identity in more than one way before accessing a product—for example, entering a password and then confirming via a code sent to their phone or email.

- **No-stakes:** Refers to assessments or activities that carry no grade or penalty, allowing students to engage with content freely and honestly without the pressure of being evaluated. The purpose of a no-stakes activity is to gauge what students already know or understand at a given point in their learning.

- **Online safety and etiquette:** Positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices.

- **Pedagogical usability:** A specific kind of usability focused on how well the product facilitates the learning process, including meeting desired learning objectives.

- **Personally relevant incentives:** Motivational features within a product that encourage student engagement by connecting rewards or recognition to something meaningful to the individual learner – such as their own goals, interests, or progress. Rather than relying on generic point systems or badges, personally relevant incentives acknowledge individual growth and effort in ways that resonate with specific students and support sustained persistence in learning.

- **Platform:** A type of edtech product that does not include content. Instead, platforms only include functionality and related features. Examples of "platforms" include learning management systems, student information systems, and assessment applications that rely on teachers to create structure, content, and assessment items.

- **Product:** An educational technology (edtech) application that can be purchased by an educational organization or individual. Digital curriculum products provide content as well as other functionality (such as interactive activities), while platform products solely provide functionality with no or very limited content.

- **Productive struggle:** The process by which students work through challenging problems or concepts without immediately receiving the answer. Rather than avoiding difficulty, productive struggle encourages students to persist, think critically, and develop a deeper understanding through the learning process itself.

- **Prototype:** A preliminary model or representation of a proposed solution, developed to test ideas, identify problems, and refine a design before a final version is produced. In learning contexts, prototyping encourages students to iterate on their thinking and learn from trial and error.

- **Sans-serif:** Refers to a category of fonts that does not include decorative finishing strokes at the ends of letters, resulting in a clean and simple appearance. Sans-serif fonts such as Arial, Helvetica, and Calibri are recommended for edtech product interfaces because they improve on-screen readability for a wide range of users, including those with visual impairments or reading differences such as dyslexia.

- **Technical usability:** The traditional type of usability focused on ease of interaction with the product. Also, the degree to which a tool helps the user meet a need or accomplish a task, including achieving a learning objective.

- **Usability:** Synonymous with "ease of use," this refers to the degree to which a product helps the user meet a need or accomplish a task, such as a teacher using an edtech product to meet learning objectives with students. Edtech usability includes both pedagogical usability (how well a product facilitates the learning process, including instructional design) as well as technical usability (the ease of use and interaction with a product, including user interface design).

- **User agency:** The ability of product users to easily navigate and use a product in ways that meet their goals. In other words, the product affordances, abilities, and features that users have at their disposal.

- **User interface (UI):** The means by which a person and a technology system interact. This can include screens, a mouse, a keyboard, as well as interaction with software applications.

- **Walled garden:** A closed digital environment in which a product limits what data are shared outside of the platform. In edtech products, a walled garden setting helps ensure that student data are not shared with third parties or used for purposes beyond the product itself.

- **Web Content Accessibility Guidelines (WCAG):** The commonly accepted accessibility standard for web content today. The guidelines emphasize four content principles: perceivable, operable, understandable, and robust.

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