

# Instructional Materials Technology Information

**Title:** Kendall Hunt Illustrative Mathematics

**Content Area:** Math

**Publisher:** Kendall Hunt

**Grades:** HS

**Copyright:** 2019

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Since EdReports released its first reviews five years ago, the materials landscape has changed dramatically, especially in the area of technology. District questions have evolved from ensuring materials could be accessed on older browsers and versions of operating systems to detailed questions about interoperability, compatibility, security, support, and digital design. These questions have become even more important during the pandemic as districts assess what instructional materials may work best in their communities not just in-person, but also remotely and in hybrid settings. Access to high quality instructional materials by all students is more important than ever, and technology plays an essential role in that access. To help provide technology information for materials that meet alignment criteria in Gateways 1 and 2, EdReports has requested publishers answer the following questions to help consumers better understand the digital design and capabilities of their instructional materials.

- Section 1 provides broader questions most frequently asked of EdReports about the design of materials. These questions are meant to provide higher level, summary information.
- Section 2 provides more fine-grained details on aspects of design and functionality.

## Considerations When Reading This Document

- EdReports is seeking the most accurate, descriptive information about curricular products. We are not evaluating quality or desirability, but documenting features in materials to empower local schools and districts with information to select materials that will work best for them given their technological capabilities and instructional vision.
- The information in this document comes directly from publishers. EdReports reviewed the information for clarity and consistency, but did not verify its accuracy. Questions you have regarding any of the reported information should be directed to the publisher of the product.
- Look at the information in the “Details” column carefully. Functionality and digital design can vary greatly depending on how a publisher responded. Most publishers provide granular information for each question to illuminate their responses.
- This document is most effective when paired with questions that relate to your local context and reviewed with both content and IT staff. Consider your district’s technological access and capacity amongst students, teachers, and schools.

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## Section 1: Usability Snapshot

This section includes questions on digital design and support that allows users quick access to essential information.

**\* Note:**

**“Yes with core product”** below should be used to indicate functionality in the core materials as reviewed by EdReports that are available without LMS integration.

**“Yes with dependencies”** below refers to functionality in the materials reviewed by EdReports that are present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, linking externally to sites outside the materials, or if functionality is dependent on a supplemental purchase.

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Are the materials designed so that students are able to access and complete work online?			X		Students are able to access content online, but the website is “read-only”. It does not provide a venue for students to enter responses to activities, practice problems, or assessments.
Do the materials support learning in hybrid settings (both in-person and remote learning) concurrently?		X			Students are able to access all of the student materials online.  One click to load the entire course into google classroom.  Since the curriculum is CC-BY, the student task statements (in the lessons), practice problem sets, and assessments have been loaded into a number of independent platforms that allow students to submit responses online.
Are tasks, activities, and lessons able to be printed either for in-class use or for use in at-home learning?	X				Teachers are able to download Word and PDF versions of the materials from the site for printing.

Is there instruction so students can work independently (or with an adult at home)?			X		There are features that support independent study. Each lesson has a written summary in the student materials, which starting in summer 2020 will also be available as videos. Each unit has a list of learning targets in the student materials to facilitate studying and self-assessment.
Does the technology facilitate a teacher's ability to differentiate lessons, tasks, or other content for students?			X		Teachers are able to download content and edit it locally. The website does not accept student work, nor is the content algorithmically adjusted.
Are there tutorials, videos, or other integrated supports in the materials to help educators to understand and/or utilize the materials?	X				The online teacher materials are extensive. They include a digital course guide, unit plans, and detailed lesson plans.
Are there tutorials, videos, or other integrated supports in the materials to help parents/guardians to understand and/or utilize the materials?	X				Parent resources are available for grades 9-12 content.
Are all of the following audiences provided access to the product as part of the core purchase? <ul style="list-style-type: none"> <li>• parents/guardians</li> <li>• Educators (Teachers, Administrators, etc.)</li> <li>• Students</li> </ul>	X				<p>All of the content is available free of charge for all three audiences.</p> <p>The site uses Google Analytics to track overall site usage. This data is available to both Kendall Hunt and Illustrative Mathematics.</p>

Are the materials designed to integrate with a Learning Management System (LMS)?	X				Common Cartridge files are available for both Canvas and Schoology LMSes. These exports contain both student and teacher-facing content. All content is editable after import, and due to the CC BY license, schools (and others) have the legal rights to modify and adapt the materials to meet their needs.
Does all content conform to the <a href="#">National Instructional Materials Accessibility Standard</a> ?	X				NIMAS files that correspond to the printed student workbooks are available.
Is there technical support during day-to-day use?	X				Is it primarily the responsibility of the client or the publisher? Publisher

## Section 2: Technology Checklist

The following checklists are designed to give more detailed information about digital design and technical capabilities in key areas of instructional materials to support state and local decision making. This list reflects details commonly requested by those making purchasing decisions at the state or local level.

### Design

Design questions address whether the materials are designed to be used digitally in an in-person environment, remote learning environment, or both. Digital design can vary, often ranging from the ability to access files that are identical to print materials online to doing tasks and assessments as part of the program. The ability to take advantage of design functionality may depend on answers to questions in other sections of the checklist such as internet capabilities, number and type of devices, etc.

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Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Are the materials designed to be used with both digital and print components?					If yes, <ul style="list-style-type: none"> <li>What are the print options? (check all that apply)</li> <li><input checked="" type="checkbox"/> Purchase hard-copy books/workbooks</li> <li><input type="checkbox"/> Photo copies available for purchase</li> <li><input checked="" type="checkbox"/> Users can print at home</li> <li>Teachers are able to download files to print at school or home.</li> <li>The digital versions sometimes contain interactive components. The print</li> </ul>
Are there print options available for student-facing materials that could be utilized in a blended digital approach?					
Is the print content identical, similar, or comparable to the digital?	X				

					counterparts to those lessons feature alternate ways for students to learn the concept.
Is the digital design of the materials intended to replicate a textbook experience?			X		
Are digital teacher guides available for the materials?	X				<ul style="list-style-type: none"> <li>Teachers can access teacher guides on the website for free. They can also download teacher guides for printing or offline use.</li> <li>Parents have access to family support materials.</li> <li>Teacher materials include sample student responses.</li> </ul>
Do the materials contain videos/animations/simulations for student learning?	X				In 9–12, approximately 1/10 of lessons have a custom-built digital applet embedded in the student materials. There is also a suite of digital math tools built into the student platform that students are taught how to use, have opportunities to choose to use, and are accessible at any time.
Is any or all online content dependent on links that are not maintained by the publisher?			X		All content is available on the site.
Do the materials include opportunities for online collaboration among students?			X		
Do the materials include built in features for student-to-teacher interaction?		X			Since the curriculum is CC-BY, the student task statements (in the lessons), practice problem sets, and assessments have been loaded into a number of independent platforms that allow students to submit responses online.



Is a 1:1 device ratio required?			X		Students can access content on the site, through printed workbooks, through downloaded and photocopied content, through an LMS, or through another platform the content has been loaded into. We do not have a specific device ratio.
Are the assessments contained within the materials able to be securely completed by students online?		X			<p>Assessments cannot be completed online.</p> <p>Since the curriculum is CC-BY, the student task statements (in the lessons), practice problem sets, and assessments have been loaded into a number of independent platforms that allow students to submit responses online.</p> <p>Teachers can download and edit the assessments in Word.</p> <p>In addition, schools can load assessments into Canvas and Schoology via Common Cartridge, and deliver assessments to students through those platforms.</p>
Is data available about user sessions (e.g., timestamps, content being viewed, callbacks fired, etc...)?		X			The site uses Google Analytics to track overall usage. It gets used to report high-level usage trends.
Are there online professional learning supports to help teachers utilize the materials?				X	Available starting July 2020: On-demand videos about math and pedagogical contents of units for professional learning purposes. Available at no cost to any curriculum user.

Are there parent/guardian resources available for school systems to utilize: <ul style="list-style-type: none"> <li>• For when there is in-person instruction?</li> <li>• For when there is hybrid instruction?</li> <li>• For creating continued learning plans for distance learning schedules?</li> </ul>			X		
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Learning Management Systems	Blackboard	Canvas	Eduphoria	Google Classroom	ItsLearning	Moodle	Schoology	Other: Please list below
Are the materials configured to work with one or more learning management systems? Check all that apply.		X		X			X	
There are no additional costs for Common Cartridge files that can be loaded into the current versions of Canvas and Schoology. The Google Classroom integration is also free, and it automatically creates links from Google Classroom back to the Kendall Hunt instance of the IM curriculum.								

## System Access

System access questions address how users access the digital materials and what kind of logins/passwords are accepted/supported/required.

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Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Is single sign-on supported?			X		No student accounts are required.  Teachers do need to register for access to the teacher-facing materials.
Can the platform manage staff assigned to multiple schools with a single sign-on?	X				Staff assigned to multiple schools can register at the district level.
Can co-teachers be assigned to multiple classes?			x		Not applicable: there is no notion of student assignment to specific classes in the platform.
Can students who move between teachers or schools using the same materials be re-assigned without losing their work/progress?			x		The platform does not require student accounts.
Can the platform provide user accounts for staff members (principals and other admin) who are not assigned students?	x				The platform does not have a notion of student assignments. Any staff at a school or district can create an account.

Can passwords be reset without assistance from trained IT staff?	x				All accounts can be reset without assistance. This feature cannot be disabled.
When working offline, does the product automatically sync when a connection is re-established?			x		Not applicable: no data is stored on the platform, so there is nothing to sync.

## Technical Support

Technical Support questions are designed to help users understand what assistance to expect. These details are important to consider alongside local capacity for devices, networks, and use. Considering what level of independence users will have alongside these criteria can help schools and districts reflect on their needs for support.

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Technical Support	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Is technical support provided to districts during initial set-up and deployment?	x				We provide tech support during normal business hours. Monday- Friday 8:00am CST- 5:00pm CST
Is technical support provided during the duration of the contract?	x				Support is provided during the contract.  Users can create a support request via email or live chat. There is a 800 number but email and live chat are preferred.

If utilizing a free or trial version, is technical support provided?		x			Yes we provide tech support for trial version.
Are there self-service supports for troubleshooting?				x	Not at this time but in development and will be ready by Fall of 2020.
Does technical support include planning for emergency access and district support?		x			Yes to District Support.

## Compatibility

Compatibility questions address technical compatibility specifications. It is designed to help users understand how the materials will look and operate on various devices. These details are important to consider alongside local capacity for devices, networks, and use. Understanding what devices function best can help determine users' needs for district device or technical support.

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Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Does the product have a native mobile application?			X		
Is the product browser-based?	X				
Does the product use responsive design for rendering on smartphones?	X				

Does the product use responsive design for rendering on tablet devices?	X				
Does the product use responsive design for rendering on laptop devices?	X				
Does the product use responsive design for rendering on desktop devices?	X				
Are all users (students/teachers/staff/admin/parents) permitted to use the product on more than one device (e.g. computer at school and a laptop at home or a smartphone and a laptop)?	X				No additional software downloads or licenses are necessary

Device Type	Mark box if device is compatible	Oldest operating system/version supported	Newest operating system/version supported	Details Indicate if the materials are designed for a specific device type or if they are generally compatible.
Windows	x			This program is web-based and can be accessed on any device that can access the web.
Linux	x			This program is web-based and can be accessed on any device that can access the web.
Windows Tablet	x			This program is web-based and can be accessed on any device that can access the web.
Apple Laptop/Desktop	x			This program is web-based and can be accessed on any device that can access the web.
iPhone	x			This program is web-based and can be accessed on any device that can access the web.
iPad	x			This program is web-based and can be accessed on any device that can access the web.
Android Phone	x			This program is web-based and can be accessed on any device that can access the web.

Android Tablet	x			This program is web-based and can be accessed on any device that can access the web.
Chromebook/Chrome OS	x			This program is web-based and can be accessed on any device that can access the web.
Amazon Fire OS	x			This program is web-based and can be accessed on any device that can access the web.
Other E-Reader	x			This program is web-based and can be accessed on any device that can access the web.
Interactive Whiteboard	x			This program is web-based and can be accessed on any device that can access the web.

Browser		Operating System						
		Apple		Windows		Linux	Chrome OS	N/A
	Check if browser is compatible	Oldest version supported	Newest version supported	Oldest version supported	Newest version supported			
Chrome	x							
Firefox	x							
Safari	x							
Edge (formerly Internet Explorer)	x							
Internet Explorer	x							
Other:____	x							
Additional Notes: Additional Notes: The site should render fine in all modern browsers.								

## Accessibility

Curricula with digital capabilities integrate accessible supports in a variety of ways. Accessibility questions pertain specifically to diverse learners who may need specific supports to be able to successfully interact with materials.

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Screen Readers	<b>x</b>				
Screen Magnification Software	x				
Text Readers	x				
Adjustable Print Size	x				
Speech Input Software	x				(Assuming these devices are being using to control a browser)
Header Point Devices	x				(Assuming these devices are being using to control a browser)
Motion/Eye Tracking Devices	x				(Assuming these devices are being using to control a browser)
Single Switch Entry Devices	x				(Assuming these devices are being using to control a browser)
Braille Readers/ Display Devices	x				(Assuming these devices are being using to control a browser)
Closed Captioning	x				
Alternative Input Devices	x				(Assuming these devices are being using to control a browser)
High Color Contrast Display Options	x				



Translation of Text to Other Languages			x		
Bilingual Dictionaries available for students			x		
Are there required accessories (headsets, speakers)?			x		
Multiple Playback of audio/video					
Can students adjust the speed of audio/video playback?					There are no student-facing videos.
Are these accessibility supports able to be turned on/off?	x				
Does all browser-based technology satisfy the Web Content Accessibility Guidelines or <a href="#">VPAT</a> ?	x				

# Additional Technology Specifications

## Data Security and Privacy

Data Security and Privacy questions address how student data storage, disposal, and adherence to privacy laws are addressed. If applicable, privacy reports and/or certificates can be found next to the respective indicator.

Questions	Check Only One			Details
	Yes	No	Under Development	
<b>Data Security:</b> Are data elements encrypted at rest, i.e. in a database or file system?		X		No student data is stored.
<b>Data Security:</b> Do the materials refer students to video, content, and other online sources that are not native to the materials?		X		
<b>Data Security:</b> Does the end-user licensing agreement allow customers to scrape data from the product?	X			The content is licensed CC BY. We do not collect or store student data.
<b>Privacy:</b> Is personally-identifying student data provided to, generated by, or stored in any systems used by the product?		X		
<b>Privacy:</b> Does the product/vendor make their student privacy policy publicly available?	X			<a href="https://www.illustrativemathematics.org/privacy-policy/">https://www.illustrativemathematics.org/privacy-policy/</a>
<b>Privacy:</b> Does the product conform with FERPA regulations (e.g., allows districts to maintain direct control of the student record, implements permissions to prevent unnecessary disclosures, etc.)?				n/a
<b>Privacy:</b> Has a third-party evaluated the product for FERPA compliance?		X		
<b>Privacy:</b> Does the product allow registration or data collection from children under the age of 13?		X		

# Installation

Feature/Requirement/Specification	Check Only One			Details
	Yes	No	Under Development	
Is the product downloaded to individual devices: one-time internet connection required?		X		
Is the product installed on individual computers (from CD-ROM/DVD, flash drive, etc.): no internet connection required?		X		
Is the product installed on LAN/WAN (school or district server): no internet connection required for teachers/students after installation?		X		
Required server configuration. Do network admins need to ensure a specific set of domains are white listed to allow the internet traffic to those endpoints?		X		
Does the product support deployment through Mobile Device Management (MDM) systems?		X		
Does the product provide a detailed schedule of updates that minimizes access interruption?		X		
Does the login authentication use district protocols to establish unique and memorable usernames and passwords?		X		
Is there an option for concurrent user licensing?				N/A

Standards Compliance/Certification	Check all that apply	Details
SIF		
CEDS		
EDUPUB		
Ed-Fi (SIS/ODS)		
Ed-Fi (Assessments)		
MS Global (Competencies and Academic Standards Exchange)		
IMS Global (Comprehensive Learner Record)		
IMS Global (Open Badges)		
IMS Global (One Roster)		
IMS Global (Caliper Analytics)		
IMS Global (Question and Test Interoperability (QTI))	X	
IMS Global (Learning Tools Interoperability (LTI))		
IMS Global (LTI Advantage)		
IMS Global (Common Cartridge)	X	
IMS Global (Lite Common Cartridge)		
IMS Global (Open Video)		
Other:		

Implementation and Scalability	Yes/No or Value
What is the average page load time?	1.7 seconds
What is the required bandwidth per user?	none
Are results of stress tests provided to customers?	No
Is a disaster recovery plan for data provided to customers?	No -- we don't collect customer data
Are customers provided with a standardized implementation plan to ensure a successful rollout?	N/A
Does the service level agreement include uptime guarantees of at least 95% excluding planned maintenance/down-times?	No
Does the product require a VPN for off site access?	No