

# Instructional Materials Technology Information

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Content Area: Math

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**Grades:** HS

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## Instructional Materials Technology Information

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 is requesting 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.

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.

<u>Section 1: Usability Snapshot</u> <u>Section 2: Technology Details</u>

- Design
- System Access



- Technical Support
- Compatibility
- Accessibility
- Additional Technology Specifications

#### Section 1: Usability Snapshot

This section includes questions on digital design and support that allows users quick access to essential information. Please do not exceed a 150 word limit per question. You may use or remove prompt text in providing additional details. Words in the detail prompt text will not count toward the word limit.

		Check O	nly One		
Questions	Yes with core product	Yes with dependencies	No	Under Development	Details
Are the materials designed so that students are able to access and complete work online?	X				Students can complete all assignments and assessments online. Assignments come with a variety of support, such as tips, hints, and corrective feedback, so students can complete them with or without a teacher present. Students have access to anywhere, anytime content with the ability to explore on their own, or teachers can create assignments for students for specific content.  Online work does not require a 1:1 device ratio. Students do need their own accounts to login to Ed: Your Friend in Learning, but students are able to login to the same device during different sessions.



			If continuous internet connectivity is a concern, the HMH Go app allows offline student access to the eBook, interactive lessons, and other lesson support.  An LMS is not required, but Common Cartridge is available for ingesting with an LMS.
In what ways do the materials support learning in hybrid settings (both in-person and remote learning) concurrently?	X		Into AGA is easily implemented in a hybrid setting. The SE is available as an eBook, and the interactive Student Edition provides students with additional guidance through supportive questions with tips, hints, and corrective feedback. It is just the right support students need when the teacher cannot be there in person.  ITools are included, so students can continue to work with manipulatives virtually during remote instruction.  Teachers can create assignments for students and receive detailed reports on student progress to further personalize instruction. Teachers can assign additional lesson resources as PDFs or interactive components with tips, hints, and corrective feedback. These include Reteach, Challenge, More Practice, RTI Tier 2 and 3 activities, and Standards Practice, providing students targeted support.



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		Ed includes a virtual classroom where teachers can schedule remote sessions and share their screen without leaving Ed. This works with Microsoft Teams and Google Meet, with other services to follow.
Are tasks, activities, and lessons able to be printed either for in-class use or for use in at-home learning?	X	<ul> <li>Into AGA contains a multitude of resources available on Ed to print for in-class or at-home use, including: <ul> <li>Journal and Practice Workbook</li> <li>Differentiated Instruction Blackline Masters (Lesson Reteach, Lesson Challenge)</li> <li>Small-Group Mini Lessons</li> <li>RTI Tier 2 and 3 Activities</li> <li>Getting Ready for High Stakes Assessment</li> <li>Assessment Guide <ul> <li>(Beginning-of-Year, Middle-of-Year, and End-of-Year Tests, Prerequisite Skills Inventory, Unit Assessments, Module Assessments, Performance Tasks)</li> <li>I Can Scales</li> <li>Exit Tickets</li> </ul> </li> </ul></li></ul>
Is there instruction so students can work independently (or with an adult at home)?	X	Digital interactive student content is designed for students to complete independently. Supports include embedded feedback and Math on the Spot videos. Math on the Spot videos feature HMH authors and teachers discussing lesson content and solving problems. Teachers can include additional directions to students when creating online assignments



Does the technology facilitate a teacher's ability to differentiate lessons, tasks, or other content for students?	X	When students complete assignments, Ed recommends groups for the teacher to quickly differentiate and personalize instruction. The groups are editable so teachers can move students around as needed.  The online assignments provide feedback to students immediately in the form of tips, hints, and corrective feedback to help students along the way. Students can check their answers and view hints as they practice lesson content.  Students and teachers immediately get reports of how they performed on assignments and assessments upon completion.  As mentioned above, Ed does recommend groups based on performance so teachers can quickly assign content to students. When viewing student performance on standard reports, teachers can easily see what resources they can use with students to improve performance.
		Teachers can create their own assessments by writing their own questions or pulling questions from the pool of HMH-created items.
Are there tutorials, videos, or other integrated supports in the materials to help educators to understand and/or utilize the materials?	Х	Into AGA comes with a variety of support for teachers to help students implement and



understand the resources, the mathematics, and the recommended teaching strategies.

There are Professional Learning Videos online for teachers to use as needed. These videos help teachers understand the pedagogy of the program and the different resources and features of the program.

The Professional Learning Cards provide background on teaching strategies and situational transcripts of when a teacher could use the strategy.

The Planning and Pacing Guide details the program philosophy, what comes with the program, and how to implement with fidelity. The PPG also includes a standards correlation and pacing for the year.

The Teacher Edition comes with Teaching for Success notes so teachers can further their own understanding of the mathematics. It also offers an Unpacking Math Standards feature so teachers can dive into what the standards really mean.



Are there tutorials, videos, or other integrated supports in the materials to help parents/guardians to understand and/or utilize the materials?	X	Math on the Spot and Lesson Support Videos are provided online. Math On the Spot videos relate specifically to a problem within the More Practice/Homework.  School-Home Letters are provided for every module in English, Spanish, Haitian Creole, and Portuguese, informing parents of the content of the modules along with an activity they can do at home with their children.
Are all of the following audiences provided access to the product as part of the core purchase?  • parents/guardians • Educators (Teachers, Administrators, etc.) • Students	X	Educators and students have their own accounts to use on Ed. Parents/guardians can sign on using their students' accounts where they will be able to see everything a student can see, including reviewing their assignments and viewing assignment reports.  Today, school and district leaders have access to the HMH Growth Measure assessment results summarized across the grades, schools, teachers and classes. We are extending this to the specific student results per class, adding additional results at the domain level to improve the instructional next steps coming from the Growth Measure and making updates to the scores and performance levels to improve the accuracy and reliability of the data.  We are actively building support for school and district leaders to see standards based results from



		the Into program assessments similar to what teachers see today. Following that will be usage reports for school and district leaders around logins and content utilization.
Are the materials designed to integrate with a Learning Management System (LMS)?	X	In addition to digital program access via our web-based Ed platform, <i>Into AGA</i> is available in the IMS Global Common Cartridge Standard. This combines the high-quality curriculum with the IMS interoperability standards to deliver digital content that can be accessed in an IMS-conformant LMS. HMH Common Cartridges are currently compliant to the following IMS interoperability technical specifications: CC v1.2 (Thin Profile), CC v1.3 (Thin Profile), and QTI v2.1.
Does all content conform to the National Instructional Materials Accessibility Standard?	X	In compliance with the requirements of the Individuals with Disabilities Education Act (IDEA) of 2004 and its latest revision issued in 2006, HMH provides electronic files to the National Instructional Materials Access Center (NIMAC) system for all printed textbooks and other required core content. Those materials can be converted into alternative assistive technology products for braille, large print, and screen reader programs via a National Instructional Materials Accessibility Standard (NIMAS) file on



		the NIMAC system. To see the range of HMH products available from NIMAC, please visit <a href="https://nimac.overdrive.com/ContentInventory">https://nimac.overdrive.com/ContentInventory</a> .
Is technical support during day-to-day use primarily the responsibility for the client or the publisher?	X	Technical support is available for teachers, administrators, school-level and district-level technology leaders, and students/families throughout the duration of the contract. Support is offered by phone, email, webform, and web-based self-service. Please see our response in the Technical Support section of this questionnaire for additional details.

#### **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. You may use or remove prompt text in providing additional details.

#### 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.

#### \* Note:

"Yes with core product" below should be used to indicate functionality in the materials purchased that are available without LMS integration.

		Check O	nly One		
Questions	Yes with core product	Yes with dependencies	No	Under Development	Details
Are the materials designed to be used with both digital and print components?  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					If yes,  What are the print options?  _x_ Purchase hard-copy books/workbooks  Photo copies available for purchase  _x_ Users can print at home  All student facing materials in print are available online and can be utilized in a blended digital approach. Within online student accounts, students have free-play access to the eBook, interactive student lessons, and other resources.  Teachers can assign many resources as an interactive, auto-scored assignment. Teachers also have access to additional printable, online content to use in a blended environment.
comparable to the digital?	X				



		The print student edition and assessments are similar to the digital versions. There are a few differences, as the item types in digital and print will vary. The interactive content utilizes tech-enhanced item types and response types that are not accessible in a print product. So, the structure of some tasks and problems changes in the digital, interactive environment. The interactive lessons were designed to support students with additional questions, tips, hints, and corrective feedback, but they allow students to complete lessons without needing a teacher walking them through step-by-step.
Is the digital design of the materials intended to replicate a textbook experience?	X	All Into AGA materials that are available in print are also available online in printable and/or interactive formats.  The print Student Edition is available as a digital eBook with interactive features that allow the students to highlight and take notes.  Each lesson in the print Student Edition is also available as an Interactive Lesson, where students have access to immediate tips, hints, and corrective feedback.
Are digital teacher guides available for the materials?	x	Teachers access the digital Teacher's Edition and Planning and Pacing Guide on Ed: Your Friend in Learning. The teacher planning materials are directly connected to student-facing lessons. The Teacher Edition addresses common errors, supports student



		discourse, and provides guiding questions and strategies. Digital teacher guides are included at no cost in the HMH Into AGA Subscription plan.  Parents and guardians cannot access the answer keys and teacher guides, but parents do have access to digital student materials. For example, the interactive student lessons, the Math on the Spot videos, and the Interactive Reteach mini-lessons include direct instruction and allow for family involvement in learning.
Do the materials contain videos/animations/simulations for student learning?	X	Into AGA provides students access to a multitude of resources for student learning, and they are all accessible on Ed: Your Friend in Learning. Every interactive student lesson has built-in tips, hints, and corrective feedback. iTools are provided as virtual manipulatives that students may use as an at-home manipulative option.  Math on the Spot video that supports learning in the classroom and at home accompany most lessons.
Is any or all online content dependent on links that are not maintained by the publisher?	x	The vast majority of content is housed on Ed and maintained by HMH. Occasional teacher references to related OER content, such as Illustrative Math and Desmos activities, are not maintained by HMH.
Do the materials include opportunities for online collaboration among students?	x	Interactions in the digital content, such as Turn and Talk and Step Away features, encourage in-person student collaboration in a blended learning environment. Student privacy laws restrict our ability to record and share student work.



			Integration between Ed: Your Friend in Learning and Microsoft Teams/Google Meet allow teachers to schedule and start videoconferencing sessions in Ed. Once in a session, teachers and students alike are able to share their screens, including representations, drawings, and answers to Into AGA tasks created using built-in math tools on Ed.
Do the materials include built in features for student-to-teacher interaction?	X		Interactive lessons and practice provide opportunities for students to share their understanding with teachers. The teacher has the ability to review student work in the interactive lessons and give individual feedback online.  Additionally, some assessments are not auto-scored and teachers provide students feedback when they use an HMH rubric to assign a score.
Is a 1:1 device ratio required?		X	A 1:1 ratio is not required, and the interactive lessons encourage collaboration with peers. Students do need their own accounts to login to Ed: Your Friend in Learning, but students are able to login to the same device during different sessions.  Teachers have the ability to assign assessments and differentiated resources online, which allows them to assess individual understanding and address specific learning needs for each student. Teachers can utilize computer labs or shared classroom sets of devices for students to complete these assignments, if a 1:1 ratio is not accessible.

Are the assessments contained within the materials able to be securely completed by students online?	X	All assessments can be securely completed by students online, and individual log-ins are required to access assigned assessments such as the Growth Measure, benchmark tests, and module tests.  If teachers wish to customize assessments, Into Math has a few options. Each module test is provided as a Word document that teachers can edit to fit the needs of their classroom. Teachers are also able to create their own assessments from an item pool generated from Into AGA assignments. Additionally, teachers can build custom assessments by writing their own items through the Create feature on Ed.
Is data available about user sessions (e.g., timestamps, content being viewed, callbacks fired, etc)?	x	When teachers create an assignment, they can see student status (not started, in progress, complete) and can see the start date and complete date.  Teachers also have the ability to see the amount of time a student spent on a completed assignment.
Are there online professional learning	X	Into AGA provides many embedded opportunities for online professional learning. Teachers have online access to Professional Learning Modules. These modules are designed to help teachers navigate online learning, as well as to orient teachers to the Into AGA program.  Every module includes a professional learning video that features a teacher or HMH author working with real students who are engaging with actual content
supports to help teachers utilize the materials?		from the program. The videos include modeling and discussion of effective teaching practices and



		feature the Language Routines and Talk Moves strategies.  Additional Professional Learning webinars with our Math Solutions specialists are available on Teacher's Corner.
	X	Parent and guardian resources are available for schools to utilize in a variety of instructional environments. School-Home letters inform families about the skills, strategies, and topics students are encountering at school, extending rich dialogue beyond the classroom. References to the Math on the Spot videos and Interactive Lesson Reteach in these letters help support learning at home.
Are there parent/guardian resources available for school systems to utilize:  • For when there is in-person	^	The Help section on Ed addresses commonly asked questions about navigating and using the platform.
<ul> <li>instruction?</li> <li>For when there is hybrid instruction?</li> <li>For creating continued learning plans for distance learning schedules?</li> </ul>		The Interactive Lessons can be accessed on the students' accounts as free-play access. These can be used as an independent learning resource with tips, hints, and corrective feedback that parents and guardians can use at any time with their child.

Learning Management	Blackboard	Canvas	Eduphoria	Google	ItsLearning	Moodle		Other:	
Systems	biackboard	Culivus	Lauphona	Classroom	listeaning	Moodie	Schoology	Please list below	



Are the materials configured to work with one or more learning management	X	X	(×)	X	X	Moodle does not support this	X	See comment below
systems? Check all that						support tris		
apply.								

HMH Into program families (National plus some state versions) are available in Common Cartridge + QTI format. These can be provided upon request at no additional charge for an equal number of licensed subscriptions to our platforms. HMH does not import the files into third party platforms on behalf of customers, and as such does not charge for that service.

HMH Common Cartridges program packages are certified at the following IMS Global technical specifications: CC v1.2, CC v1.3 (Thin Profile), and QTI v2.1. These are designed to be used with LMS platforms that support the same technical specifications. To see which platforms are certified, please visit <a href="https://www.imsglobal.org">www.imsglobal.org</a>. Note that CC & QTI experiences are subject to the proprietary functionality of LMS platforms.

(x) HMH offers a 90 day Digital Evaluation Agreement to allow educational institutions to test functional capabilities of CC & QTI in their selected systems.

#### **System Access**

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

#### \* Note:

"Yes with core product" below should be used to indicate functionality in the materials purchased that are available without LMS integration.

		Check C	nly One	<b>;</b>	
Questions	Yes	Yes	No	Under Development	Details



	with core product	with dependencies		
Is single sign-on supported?	X			<ul><li>Google SSO</li><li>SAML, OpenID Connect</li><li>ClassLink</li></ul>
Can the platform manage staff assigned to multiple schools with a single sign-on?	X			
Can co-teachers be assigned to multiple classes?	X			This can be completed via Admin imports or through the UI.
Can students who move between teachers or schools using the same materials be re-assigned without losing their work/progress?				Yes, Ed's rostering tools accommodate student mobility workflows and the appropriate core programs will be available to the student in the context of the new class the student is now in via its settings.  Specific assignments are in the context of the individual classes, however. This means that if the student has taken a specific assignment with a previous teacher and a new teacher assigns them the same piece of work, then the student would need to complete the work again in the context of the new class. There is not visibility to the new teacher to the fact the student was already assigned and completed that lesson/activity.
Can the platform provide user accounts for staff members (principals and other admin) who are not assigned students?	Х			They can be added as a school admin, giving them rights to all users in the selected school.



Can passwords be reset without assistance from trained IT staff?	X		<ul> <li>Teachers can use a "Reset Password" link, which will send them an email; they will then follow on screen instructions.</li> <li>Teachers can also set passwords for students in their class.</li> <li>If using SSO, you can turn these features off and force all traffic through the SSO Portal.</li> </ul>
When working offline, does the product automatically sync when a connection is re-established?	X		The HMH Go app is an exciting app from HMH that connects teachers and students directly to program content. With the app, teachers and students can access Into AGA content while connected to the internet from an iPad, Chromebook, laptop, or desktop computer. Users can also download content to their devices for offline access at any time. Students and teachers will be able to view their notes, highlights, and annotations that they have made while offline when they sign into their accounts on other devices.

#### **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.

<sup>&</sup>quot;Yes with core product" below should be used to indicate functionality in the materials purchased that are available without LMS integration.



<sup>\*</sup> Note:

	С	heck C	nly On	ie	
Technical Support	Yes with core product	Yes with dependencies	No	Under Development	Details
Is technical support provided to districts during initial set-up and deployment?	X				HMH Technical Support will be available via phone and email during the initial setup period.
Is technical support provided during the duration of the contract?	X				Technical support is available for teachers, administrators, school-level and district-level technology leaders, and students/families throughout the duration of the contract. Support is offered by phone, email, webform, and web-based self-service.  • Phone: 1.800.323.9239 (toll-free help desk with live specialists, Mon.–Fri., 7:00 a.m.–9:00 p.m. ET, excluding holidays)  • Email: techsupport@hmhco.com  • Webform support request tool: http://hmhco.force.com/customercase  • Technical support library: https://customercare.hmhco.com/ (click on Technical Support tab at the top)  • Help button: While on the platform, teachers and students can click the Help button. Help buttons on teacher accounts take the user to the Ed (Your Friend in Learning) Teacher Help site at http://downloads.hmlt.hmco.com/Help/Ed/Teacher/. The Help button on student accounts leads to the Ed (Your Friend in



			Learning) Student Help site,  http://downloads.hmlt.hmco.com/Help/Ed/S  tudent/. The Help site for school-level and district-level administrators is  http://downloads.hmlt.hmco.com/Help/Ed/ Administrator/.  The majority of requests that arrive by phone are solved within the first contact, and requests received by email/webform receive a response within 24 hours. When a service request involves a more complex issue, our team of technical experts immediately begins working toward a solution and continues to maintain their focus until the issue is resolved.
If utilizing a free or trial version, is technical support provided?	X		Tech support free for all programs, pilot/trial or full purchase.
Are there self-service supports for troubleshooting?	X		Please see our above technical support response for details on available self-service methods.
Does technical support include planning for emergency access and district support?	х	I	HMH provides support for alternative access to our curriculum in times of crisis/need. More details can be found on our Learning Support page: https://www.hmhco.com/learningsupport

### 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.

#### \* Note:

"Yes with core product" below should be used to indicate functionality in the materials purchased that are available without LMS integration.

	(	Check C	nly One	<b>e</b>		
Questions		LMS Dependent	No	Under Development	Details	
Does the product have a native mobile application?	X				There is an offline app available for content, though it does not offer the full system functionality that is available in the online version.	
Is the product browser-based?	X				Into AGA is accessible via the web-based Ed platform, using modern browsers that utilize HTML5 technology. Please see the following link for a listing of supported browsers:  https://customercare.hmhco.com/csrportalnew/pts/platforms/.	
Does the product use responsive design for rendering on smartphones?			X		Smartphones are not supported due to the limited screen size. Devices with screens 7" and smaller will not render all program content.	
Does the product use responsive design for rendering on tablet devices?	X				Please see our responses in the following table for supported devices and operating systems.	
Does the product use responsive design for rendering on laptop devices?	Х				Please see our responses in the following table for supported devices and operating systems.	



Does the product use responsive design for rendering on desktop devices?	X	Please see our responses in the following table for supported devices and operating systems.
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	Licenses for HMH digital content allows for users to access program resources on multiple supported devices. Each licensed user is provided with his/her own login credentials.

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	×	8.1	10	HMH maintains an updated Product Technology Snapshot, at <a href="https://customercare.hmhco.com/csrportalnew/pts/home/">https://customercare.hmhco.com/csrportalnew/pts/home/</a> , that provides details on all supported operating systems and browsers, as well as recommended configurations.
Linux				
Windows Tablet		8.1	10	
Apple Laptop/Desktop	⊠	Mac 10.4	Mac 10.5	
iPhone				
iPad	⊠	iOS 12 (7"+ screen)	iOS 13 (7"+ screen)	
Android Phone				



Android Tablet	×	Android 7.1 & above (7"+ screen)	Android 7.1 & above (7"+ screen)	
Chromebook/Chrome OS		latest	latest	
Amazon Fire OS				
Other E-Reader				
Interactive Whiteboard				

	_		Operating System											
Browser		Ар	ple	Winc	lows									
	Check if browser is compatible	Oldest version supported	Newest version supported	Oldest version supported	Newest version supported	Linux	Chrome OS	N/A						
Chrome	⊠	latest	latest	latest	latest		latest							
Firefox	⊠	latest	latest	latest	latest									
Safari	⊠	latest	latest											
Edge (formerly Internet Explorer)	⊠			latest	latest									
Internet Explorer														
Other:														



#### **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.

		Check O	nly One		
Questions	Yes with core product	Yes with dependencies	No	Under Development	Details
Screen Readers	X				Alternative text-based versions (with screen reader capability) or core videos are provided in the Student Editions.
Screen Magnification Software		X			Built-In OS magnifier
Text Readers		Х			Text-to-Speech functionality is built into the OS and Browsers in some cases
Adjustable Print Size				X	
Speech Input Software		X			Third Party input software and hardware can be used at the user's discretion but not something we test on
Header Point Devices		х			Third Party input software and hardware can be used at the user's discretion but not something we test on



Motion/Eye Tracking Devices	Х			Third Party input software and hardware can be used at the user's discretion but not something we test on
Single Switch Entry Devices	х			Third Party input software and hardware can be used at the user's discretion but not something we test on
Braille Readers/ Display Devices	X			
Closed Captioning			Х	
Alternative Input Devices	х			Third Party input software and hardware can be used at the user's discretion but not something we test on
High Color Contrast Display Options			Х	
Translation of Text to Other Languages		X		
Bilingual Dictionaries available for students		X		
Are there required accessories (headsets, speakers)?		Х		
Multiple Playback of audio/video		Х		We do not support third party audio/video players other than our built-in Ed players.
Can students adjust the speed of audio/video playback?		х		
Are these accessibility supports able to be turned on/off?	Х			User can disable read-along audio or video audio in favor of the screen reader read text alternatives
Does all browser-based technology satisfy the Web Content Accessibility Guidelines or <a href="VPAT">VPAT</a> ?			x	The <i>Into AGA</i> program's digital content targets accessibility compliance, and we are currently remediating any gaps in order to provide



		students, teachers, and administrators with a WCAG 2.0 AA user experience. All <i>Into AGA</i> content and electronic instructional materials will gain WCAG 2.0 AA compliance through
		2021.

## **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		k Only	y One	
		No	Under Development	Details
Data Security: Are data elements encrypted at rest, i.e. in a database or file system?	X			Houghton Mifflin Harcourt takes protection of our customers' user data very seriously. HMH has implemented and maintains technical, administrative, and physical security controls that are designed to protect the security, confidentiality, and integrity of personal information collected through our learning platforms from unauthorized access, disclosure, use, or modification.  Our secure data management procedures include the following:



			<ul> <li>All user data are encrypted using standard Internet protocols;</li> <li>All user data on our interface are transferred over HTTPS;</li> <li>All user data in transit are protected by TLS 1.2;</li> <li>All user data are housed on a scalable hosting architecture with AWS;</li> <li>All user data are stored behind AES-256 encryption algorithms.</li> </ul>
<b>Data Security:</b> Do the materials refer students to video, content, and other online sources that are not native to the materials?		X	
Data Security: Does the end-user licensing agreement allow customers to scrape data from the product?		X	When the site is manually accessed by the users, data can only be extracted using the reporting features provided in the Product and the end-user license provides the details of the 'Terms of Service/Use'.  Automated or Bot based content/data scrapping access to the products are controlled and regulated by the Web Application Firewall managed by the InfoSec Team. Any unknown bot access to the products are detected and blocked regularly. Exceptions to this control will be considered with a business justification requested and signed-off by the HMH business stakeholder.
<b>Privacy:</b> Is personally-identifying student data provided to, generated by, or stored in any systems used by the product?	X		Please see our K-12 Learning Platforms Privacy Policy, at <a href="https://www.hmhco.com/privacy-policy-k12-learning-platforms">https://www.hmhco.com/privacy-policy-k12-learning-platforms</a> , for a listing of the types of data elements required to participate in our learning platforms. This



			includes information from administrators, teachers, students, schoolwork, user-generated content, and usage.
<b>Privacy:</b> Does the product/vendor make their student privacy policy publicly available?	Х		https://www.hmhco.com/privacy-policy-k12-learning-p
<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.)?	X		Our compliance with FERPA is delineated at <a href="https://www.hmhco.com/privacy-policy-k12-learning-platforms">https://www.hmhco.com/privacy-policy-k12-learning-platforms</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?	Х		HMH Privacy Policy: <a href="https://www.hmhco.com/privacy-policy-k12-learning-platforms">https://www.hmhco.com/privacy-policy-k12-learning-platforms</a>

## Installation

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Feature/Requirement/Specification	Yes	No	Under Development	Details	
Is the product downloaded to individual devices: one-time internet connection required?	Х			There is an offline app available for content, though it does not offer the full system functionality that is available in the online version. Content must be downloaded to the app prior to Internet disconnection and/or disruption.	



Is the product installed on individual computers (from CD-ROM/DVD, flash drive, etc.): no internet connection		X	
required?			
Is the product installed on LAN/WAN (school or district server): no internet connection required for teachers/students after installation?		Х	
Required server configuration. Do network admins need to ensure a specific set of domains are whitelisted to allow the internet traffic to those endpoints?	X		Please see  https://customercare.hmhco.com/product/techsuppor  t/CCTechSupportSearchResults.html?isid=52829 for details on URLs that should be whitelisted and allowed to pass through firewalls, proxies, and content filters.
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		Any updates required to support the Ed platform and/or <i>Into AGA</i> will take place during low-traffic times—weekends, extended holiday breaks, and after 10:00 pm ET—in order to prevent disruption to users.
Does the login authentication use district protocols to establish unique and memorable usernames and passwords?	X		The program allows authorized users to establish unique student and staff IDs. Please refer to the following link for information on protocols: <a href="http://downloads.hmlt.hmco.com/Help/Ed/Administrator">http://downloads.hmlt.hmco.com/Help/Ed/Administrator</a> .  Or.
Is there an option for concurrent user licensing?	X		Concurrent use is available based on the number of licenses purchased. That is, licenses for HMH digital content is per user. Licenses are managed by the Technology Contact appointed by the school district, and can be deleted and re-issued each year.



Standards Compliance/Certification	Check all that apply	Details
SIF		
CEDS		
EDUPUB		
Ed-Fi (SIS/ODS)		
Ed-Fi (Assessments)		
IMS Global (Competencies and Academic Standards Exchange)	Х	CC/QTI content implemented beginning BTS 2020 will align with CASE.
IMS Global (Comprehensive Learner Record)		
IMS Global (Open Badges)		
IMS Global (One Roster)	Х	Please refer to <a href="https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3">https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3</a> <a href="mailto:7301?from_cert=true">7301?from_cert=true</a> for a listing of all active HMH certifications.
IMS Global (Caliper Analytics)		
IMS Global (Question and Test Interoperability (QTI))	Х	Please refer to <a href="https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3">https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3</a> <a href="mailto:7301?from_cert=true">7301?from_cert=true</a> for a listing of all active HMH certifications.
IMS Global (Learning Tools Interoperability (LTI))	X	Please refer to <a href="https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3">https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3</a> <a href="mailto:7301?from_cert=true">7301?from_cert=true</a> for a listing of all active HMH certifications.
IMS Global (LTI Advantage)		



IMS Global (Common Cartridge)	-	Please refer to <a href="https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3">https://site.imsglobal.org/membership/members/houghton-mifflin-harcourt/3</a> <a href="mailto:7301?from_cert=true">7301?from_cert=true</a> for a listing of all active HMH certifications.
IMS Global (Lite Common Cartridge)		
IMS Global (Open Video)		
Other:		

Implementation and Scalability	Yes/No or Value
What is the average page load time?	It is the goal of HMH to have all pages load in a reasonable time (within a few seconds), though it is often impossible to predict specific behavior on a user's end due to the differences in each location and machine's connection speeds, network bandwidth, browser settings, and other connectivity variables.
What is the required bandwidth per user?	All HMH platforms are global in scale and are currently supporting over a million users on a daily basis. We do recommend an average of 250 kbps of bandwidth per concurrent workstation or mobile device.
Are results of stress tests provided to customers?	No.
Is a disaster recovery plan for data provided to customers?	Yes. The Ed platform is a cloud infrastructure hosted by AWS. AWS uses a scalable hosting architecture, providing our customers with a cloud-based solution with failover capacity. All AWS services have operational redundancy, which would be included in an overall disaster resilience and recovery plan.
Are customers provided with a standardized implementation plan to ensure a successful rollout?	Yes. HMH has a standardized self-service path for implementation support for all programs, or an ability to work with our preferred integration partner (ClassLink) with special benefits.
Does the service level agreement include uptime guarantees of at least 95%	Houghton Mifflin Harcourt is dedicated to providing our customers with the highest quality Technical Support, and we believe in addressing all customer issues in a timely manner. We strive to provide 99.9% uptime outside of our regularly-scheduled



excluding planned	maintenance and update windows (weekends, extended holiday breaks, and after
maintenance/down-times?	10:00 pm ET). In the event of an unplanned service outage, HMH will work diligently to
	resolve any technical issues the District may encounter as soon as possible.
Does the product require a VPN for off-site	No.
access?	

