

Instructional Materials Technology Information

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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.

Section 1: Usability Snapshot

Section 2: Technology Details

- <u>Design</u>
- <u>System Access</u>
- <u>Technical Support</u>
- <u>Compatibility</u>
- <u>Accessibility</u>
- 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.

* Note:

"Yes with core product" below should be used to indicate functionality in the materials purchased that are available without LMS integration. "Yes with dependencies" below refers to functionality present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, or linking externally to sites outside the materials.

	Check Only 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?					 If yes, Note if this is within the native materials system or if it requires LMS integration or other integrated software. We utilize the Google Suite for our student and teacher materials. Students are able to access curriculum materials as Google Docs, Slides, and Sheets. We also offer a Google Classroom version of our materials. Does online work require a 1:1 device ratio? No. Does each student need a continuous reliable internet connection to use all materials features? No. Google Docs can be saved to allow for online access. Some of 		



		our units rely on videos, which are hosted on YouTube. Our Remote Learning Adaptations have guidance for how to ensure students without internet access can access the necessary content in videos and engage in the learning.
In what ways do the materials support learning in hybrid settings (both in-person and remote learning) concurrently?		We have created a guide for Remote Learning and Remote Learning Adaptations of our units. They can both be accessed free of charge from our website www.openscied.org/remote-learning-adaptatio ns/
Are tasks, activities, and lessons able to be printed either for in-class use or for use in at-home learning?	A A A A	All materials can be printed from either the PDF version of our materials or the Google Doc version of our materials. Both are free to download from our website.
Is there instruction so students can work independently (or with an adult at home)?		We have created Remote Learning Adaptations of our units that provide guidance for students to be able to engage with our materials asynchronously. While we provide this guidance, the materials were not designed to be used in this manner and students will not benefit from the sensemaking that comes from discussions with their classmates. The Remote Learning Adaptations can be accessed free of charge from our website www.openscied.org/remote-learning-adaptatio ns/



Does the technology facilitate a teacher's ability to differentiate lessons, tasks, or other content for students?

 \checkmark

Our student and teacher materials are offered as Google Docs and Slides and teachers are able to easily copy entire units to their own Google Drive and then make modifications as they see fit for their students. We also offer a Google Classroom version of the materials that is loaded as a new classroom with draft posts teachers can modify before assigning to their students.

- Does the technology itself differentiate based on student responses?
 No.
- Does it provide feedback to students directly as they complete assignments?
 No.
- Does the technology provide recommendations to the teacher?
 No.
- What control does the teacher have over the content? (e.g., Can changes be made to a question's wording? Can teachers choose specific reading selections?)
 - Teachers have complete control over the content. We trust the expertise of teachers and aim to empower them with the ability to adjust materials as they see fit.

Every unit has a playlist of teacher-facing videos that provide guidance on the investigations, how to facilitate the lesson and how to utilize technology tools. Additionally, every unit has a



Are there tutorials, videos, or other integrated

supports in the materials to help educators to

understand and/or utilize the materials?

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			hour-long archived webinar that summarizes the unit.
Are there tutorials, videos, or other integrated supports in the materials to help parents/guardians to understand and/or utilize the materials?	~		Every unit has a Home Communication letter that is meant to be sent home before the start of the unit. These letters are available in English and Spanish and are shared as Google Docs so that educators can adjust the language and create additional translations.
 Are all of the following audiences provided access to the product as part of the core purchase? parents/guardians Educators (Teachers, Administrators, etc.) Students 	~		All of our materials are freely available from our website for educators and parents/guardians. We require a short registration with minimal information gathered to allow access to the materials for adults. Students do not register on our website to access materials. All of the student-facing materials on our website (videos, simulations) are available without registration. We do not collect any student data.
Are the materials designed to integrate with a Learning Management System (LMS)?	~		All of our materials are accessible outside of an LMS. We have designed a Google Classroom version of our materials to make it easier for educators. Since the materials are designed in the Google Suite, they can easily be utilized with other Learning Management Systems.
Does all content conform to the <u>National</u> Instructional Materials Accessibility Standard?	~		All of our Student Editions can be found in the <u>NIMAC Inventory</u> . Additionally, by providing all of our materials in Google Doc format, educators and students are able to modify as needed.
Is technical support during day-to-day use primarily the responsibility for the client or the publisher?	~		OpenSciEd provides technical support to Educators who cannot login to our website or are having a difficult time loading the simulations. Since students do not login to the website and no student data is captured, there is



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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:

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	Check Only 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	~				If yes, • What are the print options? (check all that apply) <u><</u> Purchase hard-copy books/workbooks Photo copies available for purchase <u><</u> Users can print at home		



utilized in a blended digital approach? Is the print content identical, similar, or comparable to the digital?		 Add any additional details. Our materials are free to download as PDF documents and can be accessed as Google Docs. Educators are welcome to print the materials with the printer of their choice or utilize one of our distribution partners to purchase printed versions of the materials. All of the student materials are available as Google Docs and can also be printed as paper handouts. The materials are written assuming that students will be utilizing a science notebook of some sort for their sensemaking. This could be a paper composition notebook or a digital version.
Is the digital design of the materials intended to replicate a textbook experience?	~	The materials are available in multiple digital forms. If the teacher is using the PDF or Google doc form, the materials mimic a textbook. If the teacher is using the Google Classroom form, the materials take advantage of Classroom's delivery mechanisms which differ from a paper textbook in presentation and organization.
Are digital teacher guides available for the materials?		 If yes, How do teachers access digital teacher guides? After registering at OpenSciEd.org, educators can preview the Google doc version of the teacher edition or make a copy of the Google doc to their own drive.



		 Are guides available to parents/guardians at home? After registering at OpenSciEd.org, parents/guardians can preview the Google doc version of the teacher edition or make a copy of the Google doc to their own drive. Do teacher planning materials connect to student-facing lessons? Yes. Are there any additional costs for these resources? No. All of our materials are free to download and use.
Do the materials contain videos/animations/simulations for student learning?		 If yes, Specify frequency (every lesson, some lessons, only teacher support, both teacher and student). Our materials have student-facing videos that introduce students to phenomena or help them gather information to make sense of them. The number of student-facing videos varies greatly depending on the unit and the focal phenomenon. Most units have a few short videos for about half of the lessons. We also have teacher-facing videos that are designed to be just-in-time support for educators as they set up investigations and facilitate learning. Our materials utilize simulations as a way of sensemaking about phenomena. The amount of time interacting with simulations and data



			 visualization tools varies from unit to unit but one average, every lesson has 2-3 simulations. Are these native to the materials or accessed by links that lead to other sources not maintained by the publisher? All of our video assets are hosted on our YouTube channel. We also provide alternative links for school systems that are not able to access YouTube. All of the simulations can be accessed from the OpenSciEd website and are freely available.
Is any or all online content dependent on links that are not maintained by the publisher?		v	 If yes, Detail permissions the district may need to set to ensure access to this content (age restriction bypass, specific URL permissions etc.).
Do the materials include opportunities for online collaboration among students?			 If yes, Describe these opportunities. Some of our units encourage students to collect and share data with other students. For example, one of our units has students contribute their height and arm span data to a data set that is shared by all middle school students using that unit. There are recommendations for how to teach that unit if access to that online data set isn't possible.
Do the materials include built in features for student-to-teacher interaction?	 		 If yes, Describe these opportunities. Some of our units encourage students to collect and share data with other students. For example, one of our units



		has students contribute their height and arm span to a data set that is shared by all middle school students using that unit. There are recommendations for how to teach that unit if access to that online data set isn't possible.
Is a 1:1 device ratio required?		 Include recommended device ratio. Our materials utilize simulations and digital tools as a way of making sense of phenomena and it is recommended that students work with a partner or a small group as they collect information from the simulation and test out their thinking. Because of that, we recommend a 1:2 or 1:4 ratio. We do provide a Google Classroom version of our materials. To best take advantage of those features, a 1:1 ration is recommended.
Are the assessments contained within the materials able to be securely completed by students online?		A benefit of using the Google Classroom version of our materials is the ease of assigning and scoring assessments. This feature is available if educators are using our Google doc versions of the unit materials within Google classroom. The security would be the security provided by Google rather than by OpenSciEd. If yes, • Is this true of all assessments? • Yes. • Are assessments editable by teachers? • Yes.



Is data available about user sessions (e.g., timestamps, content being viewed, callbacks fired, etc)?	~	If yes, • How is this gathered and reported? • Who has access to this data?
Are there online professional learning supports to help teachers utilize the materials?		We provide recorded webinars about the OpenSciEd materials and every unit. While those recordings are helpful as teachers make sense of the materials, we stronger encourage teachers to engage in synchronous in person or online professional learning when starting to use our materials. We provide our materials free of charge so that school systems can strategically utilize funds that would have been used on licensing fees and instead invest them in professional learning for teachers. We offer high quality professional learning and we have a network of providers who can also provide professional learning. www.openscied.org/professional-learning/ If yes, Describe these supports and any associated additional costs.
 Are there parent/guardian resources available for school systems to utilize: For when there is in-person instruction? For when there is hybrid instruction? For creating continued learning plans for distance learning schedules? 		We have created Remote Learning Adaptations of our units that provide guidance for students to be able to engage with our materials asynchronously. While we provide this guidance, the materials were not designed to be used in this manner and students will not benefit from the sensemaking that comes from discussions with their classmates. The Remote Learning Adaptations can be accessed free of charge from our website www.openscied.org/remote-learning-adaptations/

Learning Management Systems	d Canvas	Eduphoria	Google Classroom	ItsLearning	Moodle	Schoology	Other: Please list below
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Are the materials configured to work with one or more		v		V
learning management				
systems? Check all that				
apply.				

If the materials integrate with any of the LMS above, include information here about any additional costs and which version of your materials and the LMS was tested.

- Our Google Classroom version of the materials is free to download from our website.
- Educators are free to import our materials into the other LMSs because our materials are Open Educational Resources.
- OpenSciEd will continue to develop LMS configurations based upon school and district need.

System Access

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

* Note:

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	Check Only One						
Questions	Yes with core product	Yes with dependencies	No	Under Development	Details		
Is single sign-on supported?	~				Our materials are hosted in Google Drive, which has single sign-on functionality. If yes, List which single sign-on methods/tools are supported (e.g., Clever, ADFS, Google, etc).		
Can the platform manage staff assigned to multiple schools with a single sign-on?					N/A		



Can co-teachers be assigned to multiple classes?		Our materials connect with Google Classroom and this function is possible within Google Classroom. If yes, Describe this process. Is it managed at the teacher, school administrator, or network level?
Can students who move between teachers or schools using the same materials be re-assigned without losing their work/progress?		Depending on district settings, this may be a feature that can be utilized within Google Classroom.
Can the platform provide user accounts for staff members (principals and other admin) who are not assigned students?		 Any educator who wishes to access the materials can register on our website and freely access the materials. If yes, What roles can be assigned within the system and how are permissions/access controlled? Specify if this is part of a standard contract or would require additional purchase.
Can passwords be reset without assistance from trained IT staff?		 If yes, Describe if the customer is able to enable/disable this feature. Detail for whom (students, teachers, all staff). Students do not have accounts or passwords to reset.
When working offline, does the product automatically sync when a connection is re-established?	~	This sync functionality is available to the Google Suite features of our materials.



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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	C	Check C	only Or	ne	
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?	~				Yes, OpenSciEd offers support during initial adoption and full, both through synchronous calls during weekly office hours and asynchronously through our email support system and knowledge base.
Is technical support provided during the duration of the contract?	~				Yes, OpenSciEd offers the same on-demand support during throughout implementation as we do during initial adoption and deployment.
If utilizing a free or trial version, is technical support provided?	~				All of our digital materials are free to access and include the above technical support provided.
Are there self-service supports for troubleshooting?	~				OpenSciEd has tutorials and support resources in our knowledge base.
Does technical support include planning for emergency access and district support?			~		We host most of our materials in Google Apps for Education in Google Docs, Slides, and Sheets. We encourage teachers to copy our resources and modify them to suit their classroom needs. Because of this, there are no platform dependencies that require emergency access for 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 C	only One	e	
		LMS Dependent	No	Under Development	Details
Does the product have a native mobile application?			V		
Is the product browser-based?			V		No, the materials can be delivered through a variety of formats: paper, PDF, Google Doc, and Google Classroom. The intention is to provide the materials in whatever format best suits a teacher, school, or district.
Does the product use responsive design for rendering on smartphones?	~				
Does the product use responsive design for rendering on tablet devices?	~				
Does the product use responsive design for rendering on laptop devices?	~				
Does the product use responsive design for rendering on desktop devices?	~				



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Are all users (students/teachers/staff/admin/parents)			If ves
permitted to use the product on more than one			Are additional software downloads or
device (e.g. computer at school and a laptop at			licenses necessary?
home or a smartphone and a laptop)?	V		• No.

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				
Linux				
Windows Tablet				
Apple Laptop/Desktop				
iPhone				If supported, provide details about any differences between devices.
iPad				
Android Phone				If supported, provide details about any differences between devices.
Android Tablet				
Chromebook/Chrome OS				
Amazon Fire OS				
Other E-Reader				If supported, specify which e-readers are compatible.
Interactive Whiteboard				

Browser		Operating System									
		e	Windows								
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	Check if browser is compatible	Oldest version supported	Newest version supported	Oldest version supported	Newest version supported			
Chrome								
Firefox								
Safari								
Edge (formerly Internet Explorer)								
Internet Explorer								
Other:								
Additional Notes:								

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	~				



Screen Magnification Software	~		
Text Readers	V		
Adjustable Print Size	~		
Speech Input Software	V		
Header Point Devices		~	
Motion/Eye Tracking Devices		~	
Single Switch Entry Devices		~	
Braille Readers/ Display Devices	V		
Closed Captioning	V		
Alternative Input Devices	V		
High Color Contrast Display Options	V		
Translation of Text to Other Languages	~		If yes, • Specify available languages • Spanish
Bilingual Dictionaries available for students		~	
Are there required accessories (headsets, speakers)?	~		If yes,



		 Specify if they are provided with the materials or must be acquired separately. The materials are designed assuming the teacher is able to share audio and video with students.
Multiple Playback of audio/video	v	
Can students adjust the speed of audio/video playback?	~	
Are these accessibility supports able to be turned on/off?	~	 If yes, Specify which supports and who has access to turn them on/off.
Does all browser-based technology satisfy the Web Content Accessibility Guidelines or <u>VPAT</u> ?	~	 If yes, Provide reports from the software or organization used to test the product. UserWay.org

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			
QUESHOIIS	Yes	No	Under Development	Defails



Data Security: Are data elements encrypted at rest, i.e. in a database or file system?		~	No data is collected from users beyond the simple one-time registration educators complete to access the materials. No student level data is collected.
Data Security: Do the materials refer students to video, content, and other online sources that are not native to the materials?	~		 Is it a closed system? If no, how does it direct out of the environment? We host all of our videos on our YouTube channel. For districts that are not able to access YouTube, we provide alternative video links with each unit.
Data Security: Does the end-user licensing agreement allow customers to scrape data from the product?		~	No data is collected from users beyond the simple one-time registration educators complete to access and download the materials.
Privacy: Is personally-identifying student data provided to, generated by, or stored in any systems used by the product?		~	 If yes, List all data elements that customers are required to provide. List all data elements that are optional for customers to provide. List all data elements created by the product. List all data elements stored in any of the product's systems.
Privacy: Does the product/vendor make their student privacy policy publicly available?	~		If yes, Provide a link to the policy in the details. <u>https://www.openscied.org/openscied-terms-of-use/</u>
Privacy: 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.)?	~		
Privacy: Has a third-party evaluated the product for FERPA compliance?		~	 If yes, Identify the third party who conducted the evaluation and provide a link to the report.
Privacy: Does the product allow registration or data collection from children under the age of 13?		~	 If yes, Provide a link to the COPPA Safe Harbor certificate.

Installation

		Check Only One		
Feature/Requirement/Specification	Yes	No	Under Development	Details
Is the product downloaded to individual devices: one-time internet connection required?	~			
Is the product installed on individual computers (from CD-ROM/DVD, flash drive, etc.): no internet connection required?		~		 If yes, Estimate time per device required for setup, indicate if support is provided, and if local IT staff is needed.
Is the product installed on LAN/WAN (school or district server): no internet connection required for teachers/students after installation?		V		Districts could take the PDF versions of our materials and install them on a district server or save a Google Suite version of it to their district drive and allow offline access. Our materials are Open Educational Resources and school systems are free to use the materials as they see fit.
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?		~		 If yes, List requirements and specify if set-up support is provided.
Does the product support deployment through Mobile Device Management (MDM) systems?		~		If yes, Identify which systems are compatible.
Does the product provide a detailed schedule of updates that minimizes access interruption?		~		
Does the login authentication use district protocols to establish unique and memorable usernames and passwords?		V		 If yes, Indicate if district staff/student unique IDs are used. If other, Specify the protocols.



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Our materials are Open Educational Resources and are free for all educators to download and use from our website.

Standards Compliance/Certification	Check all that apply	Details
SIF		If checked, include where customers can verify this information.
CEDS		If checked, include where customers can verify this information.
EDUPUB		If checked, include where customers can verify this information.
Ed-Fi (SIS/ODS)		If checked, include where customers can verify this information.
Ed-Fi (Assessments)		If checked, include where customers can verify this information.
MS Global (Competencies and Academic Standards Exchange)		If checked, include where customers can verify this information.
IMS Global (Comprehensive Learner Record)		If checked, include where customers can verify this information.
IMS Global (Open Badges)		If checked, include where customers can verify this information.
IMS Global (One Roster)		If checked, include where customers can verify this information.
IMS Global (Caliper Analytics)		If checked, include where customers can verify this information.
IMS Global (Question and Test Interoperability (QTI))		If checked, include where customers can verify this information.
IMS Global (Learning Tools Interoperability (LTI))		If checked, include where customers can verify this information.
IMS Global (LTI Advantage)		If checked, include where customers can verify this information.
IMS Global (Common Cartridge)		If checked, include where customers can verify this information.



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IMS Global (Lite Common Cartridge)	If checked, include where customers can verify this information.
IMS Global (Open Video)	If checked, include where customers can verify this information.
Other:	If checked, list and include where customers can verify this information.

Implementation and Scalability	Yes/No or Value
What is the average page load time?	0 seconds
What is the required bandwidth per user?	For general web browsing and editing Google Drive documents, 0.2-0.5 Mbps per concurrent session at a minimum should provide satisfactory performance. When streaming video, at least 1 Mbps per concurrent user session is needed and >4 Mbps is required for HD video streaming.
Are results of stress tests provided to customers?	No
Is a disaster recovery plan for data provided to customers?	N/A - No data is collected from users beyond the simple one-time registration educators complete to access the materials.
Are customers provided with a standardized implementation plan to ensure a successful rollout?	We have guidance and models for implementation that are freely available from our website. We can work with districts to develop a plan that meets their needs and will support teachers and students.
Does the service level agreement include uptime guarantees of at least 95% excluding planned maintenance/down-times?	N/A
Does the product require a VPN for off site access?	No

Once this document is complete and ready to submit to EdReports, please fill-out a <u>Technology Information Document Submission</u> <u>Certification</u> to certify that the information is final and accurate.

