# 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

- 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.

#### \* 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.

Questions	(	Check O	nly 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?					If yes,  Note if this is within the native materials system or if it requires LMS integration or other integrated software.  Carolina Certified Version offers an enhanced digital version that allows all student resources to be assigned, completed and assessed through our platform, Carolina Science Online (CSO).  CSO works with any web-browser, can be integrated with a third-party Learning Management System, and is compatible with SSO platforms.  Does online work require a 1:1 device ratio?  CSO does not require 1:1 device ratio.  Does each student need a continuous reliable internet connection to use all materials features?  Internet access is required to complete and submit work online.	



		<ul> <li>Some student resources can be downloaded, completed offline, then uploaded later.</li> </ul>
In what ways do the materials support learning in hybrid settings (both in-person and remote learning) concurrently?	<b>√</b>	Students can complete work remotely or in-person capturing their noticings and wonderings, inputting data, answering questions and drawing models within CSO. Further, OpenSciEd offers a guide for Remote Learning and Remote Adaptations.
Are tasks, activities, and lessons able to be printed either for in-class use or for use in at-home learning?	<b>√</b>	Yes, all student resources are downloadable as PDF or MS Word documents. Print Student Editions that include all handouts, readings, and reference data are also available from Carolina.
Is there instruction so students can work independently (or with an adult at home)?		The interactive digital notebook on CSO includes instructions for students to complete most activities on their own. OpenSciEd has created Remote Learning Adaptations of the units that provide guidance for students to engage with the materials asynchronously, however, students may miss some of the sensemaking that comes from discussions with their classmates.
Does the technology facilitate a teacher's ability to differentiate lessons, tasks, or other content for students?		Carolina's student and teacher materials are offered as MS Word documents and PowerPoint slides to allow teachers to download and modify as needed to meet individual students' needs. The Carolina Certified Version also includes videos of many lab investigations that allow students to rewatch, stop, and play in slow motion to allow extra opportunities for students to make necessary observations and record important data.  • Does the technology itself differentiate based on student responses? No.

		<ul> <li>Does it provide feedback to students directly as they complete assignments?         No.         <ul> <li>Does the technology provide recommendations to the teacher? No.</li> <li>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?) Yes.</li> </ul> </li> </ul>
Are there tutorials, videos, or other integrated supports in the materials to help educators to understand and/or utilize the materials?		The Carolina Certified Version offers both teacher preparation videos to provide clear instructions for lab setup, and high-quality demonstration videos to see how the investigation will run in the classroom.  Every unit also has an hour-long archived webinar that summarizes the unit for the teacher.
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 PDF and MS Word documents 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		Educators have access to view student responses and provide comments and guidance back to the students to support learning. Usage data can be viewed by Administrators.  Parents/guardians can view student work, scores and teacher comments by logging in with their student's account.
Are the materials designed to integrate with a Learning Management System (LMS)?	<b>√</b>	CSO integrates with most Learning Management Systems to allow full access to all materials.



Does all content conform to the <u>National</u> <u>Instructional Materials Accessibility Standard</u> ?	1		
Is technical support during day-to-day use primarily the responsibility for the client or the publisher?	<b>√</b>		Live technical support for Carolina Science Online is available 7:30am to 6:00pm ET. For support call us at 800-334-5551 or email us at  cso support@carolina.com. For more information Visit our Support page.

### **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.

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<sup>&</sup>quot;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.

	CI	heck O	nly One		
Questions	Yes with core product de	Yes with ependencies	No	Under Development	Details



		If yes,
		<ul> <li>What are the print options? (check all that apply)</li> <li>_X Purchase hard-copy books/workbooks</li> <li>_ Photo copies available for purchase</li> <li>_ X _ Users can print at home</li> <li>Add any additional details.</li> </ul> Print and digital content is identical.
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 comparable to the digital?		Carolina offers print Student Editions that include all student handouts, readings, and reference material needed to complete investigations. Student Assessments and Procedures can be downloaded and printed for students.  Digital content offers additional accessibility features including speech-to-text, text-to-speech, change font size, type, and color, and Spanish translations.
Is the digital design of the materials intended to replicate a textbook experience?	✓	Digital materials are offered in PDF and eBook format and offer additional accessibility features including speech-to-text, text-to-speech, change font size, type, and color, and Spanish translations.
Are digital teacher guides available for the materials?		CSO provides all teacher background and instructions in an HTML format for ease of use and planning with direct links to student materials. Print Teachers Guides are also available as eBooks.  • Are guides available to parents/guardians at home? No, but are available via the OER site.  • Are there any additional costs for these resources? eBook Teacher Guides are included with purchase of an equipment kit.



					Enhanced digital is available with an optional license fee.
Do the materials contain videos/animations/simulations for student learning?					CSO provides all teacher background and instructions in an HTML format for ease of use and planning with direct links to student materials. Print Teachers Guides are also available as eBooks.  • Are guides available to parents/guardians at home? No, but are available via the OER site.
	<b>√</b>				Are there any additional costs for these resources? eBook Teacher Guides are included with purchase of an equipment kit. Enhanced digital is available with an optional license fee.
Is any or all online content dependent on links that are not maintained by the publisher?		1			Any links not maintined directly by Carolina are maintained by OSE.
Do the materials include opportunities for online collaboration among students?				1	
Do the materials include built in features for student-to-teacher interaction?	<b>√</b>				Teachers provide direct feedback on student assignments via CSO.
Is a 1:1 device ratio required?			<b>√</b>		Recommended but not required.
Are the assessments contained within the materials able to be securely completed by students online?	<b>√</b>				All assigned assessments can be securely completed and submitted via CSO.  Are assessments editable by teachers? Yes.
Is data available about user sessions (e.g., timestamps, content being viewed, callbacks fired, etc)?	<b>√</b>				Teachers and admins can view the resources students used and the time spent with the resources.  Admins can vew login metrics.



Are there online professional learning supports to help teachers utilize the materials?	1		Professional Learning materials for the OpenSciEd middle school program and each unit are available both via CSO and directly from the OpenSciEd.org website.
<ul> <li>Are there parent/guardian resources available for school systems to utilize:</li> <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>	<b>√</b>		Home Connection letter for each unit  Remote Learning Guide and Remote Learning  Adaptations for each unit

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.	<b>√</b>					<b>√</b>		

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.

### **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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"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 C	nly One	•		
Questions	Questions  Yes with core product with dependencies No		No	Under Development	Details	
Is single sign-on supported?	1				Clever, Classlink, Google Classroom, Canvas, Brightspace, EdLink	
Can the platform manage staff assigned to multiple schools with a single sign-on?	1					
Can co-teachers be assigned to multiple classes?		1			This can be accomplished with the use of other LMS's	
Can students who move between teachers or schools using the same materials be re-assigned without losing their work/progress?	<b>√</b>				Student work is preserved with their account year over year.	
Can the platform provide user accounts for staff members (principals and other admin) who are not assigned students?	1				Admin accounts are part of the standard contract     District Admin     School Admin	
Can passwords be reset without assistance from trained IT staff?	1				Teachers and admins have the ability to reset their own passwords and can administer student passwords	
When working offline, does the product automatically sync when a connection is re-established?			1		There is no offline mode for Carolina Science Online	



### **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.

#### \* 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.

	C	heck C	only Or	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?	1				Onboarding and ongoing technical support is provided as needed
Is technical support provided during the duration of the contract?	<b>√</b>				Live technical support for Carolina Science Online is available 7:30am to 6:00pm ET. For support call us at 800-334-5551 or email us at cso support@carolina.com. For more information Visit our Support page.
If utilizing a free or trial version, is technical support provided?	1				
Are there self-service supports for troubleshooting?	1				We have a support page on the site that offers training and tutorials. Tool tips are provided throughout the content for users.
Does technical support include planning for emergency access and district support?	1				

### 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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"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.

Questions		Check C	nly On	е	
		LMS Dependent	No	Under Development	Details
Does the product have a native mobile application?			1		
Is the product browser-based?	1				
Does the product use responsive design for rendering on smartphones?	1				
Does the product use responsive design for rendering on tablet devices?	1				
Does the product use responsive design for rendering on laptop devices?	1				
Does the product use responsive design for rendering on desktop devices?	1				
Are all users (students/teachers/staff/admin/parents) permitted to use the product on more than one	1				Yes, licenses are based upon user login and not upon device access.

device (e.g. computer at school and a laptop at			
home or a smartphone and a laptop)?			

Device Type	Mark box if device is compatible	Oldest operating system/version supported	Newest operating system/version supported	<b>Details</b> 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	1			No difference in device; browser- based.
<b>i</b> Pad	1			
Android Phone	✓			No difference in device; browser- based.
Android Tablet	✓			
Chromebook/Chrome OS	✓			
Amazon Fire OS				
Other E-Reader				
Interactive Whiteboard	1			

<b>D</b>		Operating Syste	g System					
Browser	Apple	Windows						



	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 Not	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 dependencies	No	Under Development	Details	
Screen Readers		1		1	Our content is WCAG- compliant or equipped with accommodation alternatives. Our	

			platform is under development to become WCAG- compliant.
Screen Magnification Software	<b>√</b>		
Text Readers		1	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Adjustable Print Size		1	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Speech Input Software	1		Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Header Point Devices	✓	✓	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Motion/Eye Tracking Devices	✓ <b>/</b>	1	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Single Switch Entry Devices			Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Braille Readers/ Display Devices	✓ <b>/</b>	1	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.



Closed Captioning		1		<b>√</b>	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Alternative Input Devices		<b>√</b>		<b>√</b>	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
High Color Contrast Display Options		<b>√</b>		<b>√</b>	Our content is WCAG- compliant or equipped with accommodation alternatives. Our platform is under development to become WCAG- compliant.
Translation of Text to Other Languages	1				All student resources are available in Spanish.
Bilingual Dictionaries available for students			1		
Are there required accessories (headsets, speakers)?			1		
Multiple Playback of audio/video		1			
Can students adjust the speed of audio/video playback?			1		
Are these accessibility supports able to be turned on/off?		1			All can be suppressed by not using supporting software.
Does all browser-based technology satisfy the Web Content Accessibility Guidelines or VPAT?	1				This is an example of the report we receive for each lesson.



# **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	Dalla Va	
			No	Under Development	Details	
	<b>Data Security:</b> Are data elements encrypted at rest, i.e. in a database or file system?	1			All data is encrypted at rest by using a NIST- approved keyring encryption standard, developed and provided by Percona database software.	
	<b>Data Security:</b> Do the materials refer students to video, content, and other online sources that are not native to the materials?	<b>√</b>			We play streaming materials securely hosted on https://www.brightcove.com/	



<b>Data Security:</b> Does the end-user licensing agreement allow customers to scrape data from the product?	1		Some materials, such as teacher supports and student PDFs, can be downloaded locally from the site.
<b>Privacy:</b> Is personally-identifying student data provided to, generated by, or stored in any systems used by the product?		1	All the system's Student PII is stored in AWS- hosted, encrypted databases. None of the contents are used in analytics or distributed to any other system.
<b>Privacy:</b> Does the product/vendor make their student privacy policy publicly available?	1		https://carolinascienceonline.com/#/children-privacy-policy
<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.)?	1		
<b>Privacy:</b> Has a third-party evaluated the product for FERPA compliance?		1	
<b>Privacy:</b> Does the product allow registration or data collection from children under the age of 13?	V		The timing and amount of information that we collect from guests will depend on which websites and Online Services are utilized by a guest and how much the guest interacts with our systems. Among the information that we may ask children for are their name, contact information for their parents or guardians as well as themselves, information about their classes, teachers age, gender or education level, and other similar information designed to allow us to tailor the educational content to their needs

# Installation

	Check Only One			
Feature/Requirement/Specification	Yes	No	Under Development	Details



Is the product downloaded to individual devices: one-time internet connection required?		1	
Is the product installed on individual computers (from CD-ROM/DVD, flash drive, etc.): no internet connection required?		<b>√</b>	
Is the product installed on LAN/WAN (school or district server): no internet connection required for teachers/students after installation?		<b>√</b>	
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?	<b>√</b>		https://carolinascienceonline.com/ https://www.brightcove.com/ Support is available upon request
Does the product support deployment through Mobile Device Management (MDM) systems?		1	
Does the product provide a detailed schedule of updates that minimizes access interruption?	1		
Does the login authentication use district protocols to establish unique and memorable usernames and passwords?	<b>√</b>		Districts may specify their own usernames and passwords, as long as passwords are longer than 8 characters.
Is there an option for concurrent user licensing?	1		Licensing is provided at the district level.

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.
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?	
What is the required bandwidth per user?	
Are results of stress tests provided to customers?	No, stress tests are conducted and analyzed internally.

Is a disaster recovery plan for data provided to customers?	No, disaster recovery protocols are defined and tested internally.
Are customers provided with a standardized implementation plan to ensure a successful rollout?	No, Carolina follows a best- practices software development lifecycle that ensures continuous high quality.
Does the service level agreement include uptime guarantees of at least 95% excluding planned maintenance/down-times?	Yes
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.