Instructional Materials Technology Information

Title: Zearn

Content Area: Math

Publisher: Zearn

Grades: K-5

Copyright: 2016/2018

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 has requested publishers answer the following questions to help consumers better understand the digital design and capabilities of their instructional materials.

- Section 1 provides broader questions most frequently asked of EdReports about the design of materials. These questions are meant to provide higher level, summary information.

- Section 2 provides more fine-grained details on aspects of design and functionality.

Considerations When Reading This Document

- EdReports is seeking the most accurate, descriptive information about curricular products. We are not evaluating quality or desirability, but documenting features in materials to empower local schools and districts with information to select materials that will work best for them given their technological capabilities and instructional vision.

- The information in this document comes directly from publishers. EdReports reviewed the information for clarity and consistency, but did not verify its accuracy. Questions you have regarding any of the reported information should be directed to the publisher of the product.

- Look at the information in the "Details" column carefully. Functionality and digital design can vary greatly depending on how a publisher responded. Most publishers provide granular information for each question to illuminate their responses.

- This document is most effective when paired with questions that relate to your local context and reviewed with both content and IT staff. Consider your district's technological access and capacity amongst students, teachers, and schools.

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Section 1: Usability Snapshot

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

* Note:
"Yes with core product" below should be used to indicate functionality in the core materials as reviewed by EdReports that are available without LMS integration.
"Yes with dependencies" below refers to functionality in the materials reviewed by EdReports that are present or accessible only through working in a separate LMS, by utilizing other software as a plug-in, linking externally to sites outside the materials, or if functionality is dependent on a supplemental purchase.

Questions	Check Only One				Details
	Yes with core product	**Yes** with dependencies	**No**	Under Development	
Are the materials designed so that students are able to access and complete work online?	X				Zearn Math is designed so that students can access and complete the extensive set of materials online, directly through the Zearn website. These materials include: ● **(Grades 1-5)** One digital lesson for every day of instruction (800+ total lessons) with a balance of fluency, concept development and application work ● **(Grades 1-5)** Video-based concept development led by on-screen teachers using interactive activities with digital math models ● **(Grades 1-5)** Personalized, interactive digital learning experience with embedded remediation and supportive scaffolding based on student struggle ● **(K)** Short, engaging digital activities (one for every day of instruction) designed to build number sense with embedded supports that

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						precisely address misconceptions in real time.
Do the materials support learning in hybrid settings (both in-person and remote learning) concurrently?		X				Zearn Math is a top-rated K–5 math program that brings together hands-on teaching and immersive digital learning. Zearn Math offers a personalized digital lesson and instructional materials for a teacher-led lesson for every day of math instruction.

For Grades 1-5, Digital lessons include video-based lessons with a balance of fluency, concept development and application work, and supportive remediation. Zearn Math also offers real-time reports that support teachers and administrators with monitoring and providing feedback on student progress and struggle through digital lessons.

For Kindergarten, Digital Activities are short, engaging and designed to build number sense. Each activity has embedded supports to address misconceptions in real time. Zearn Math also offers a real-time report for K that enables teachers to monitor student progress in their digital fluency work.

Zearn is a comprehensive resource that schools can use to support teachers and students when encountering the complexity of hybrid learning. |
| Are tasks, activities, and lessons able to be printed either for in-class use or for use in at-home learning? | | X | | | | Zearn Math offers paper-based student materials that can be printed and used either for in-class or at-home learning, including: |

					- Daily lesson-level resources (all available in downloadable format)- **(G1-5)** Paper-based Student Notes and Exit Tickets to use alongside the digital lessons **(K)** Paper-based Problem Sets and Exit Tickets to complete after the lesson in order to apply conceptual understanding(s) learned during the lesson **(K-5)** Paper-based unit level assessments - Mid-and End-of-Mission Assessments that consist of open response items that require students to show their work or explain their thinking in a variety of ways (available in downloadable format via School Accounts) **(G1-5)** Optional materials for practice - Problem Sets, Homework (available in downloadable format
Is there instruction so students can work independently (or with an adult at home)?		X			All Zearn Math G1-5 Independent Digital Lessons include interactive and multisensory videos that feature real on-screen teachers. Each digital lesson includes an adaptive fluency, a guided practice, and an independent practice—all of which can be completed independently without adult support. Zearn Math K Digital Activities are also designed to be completed independently without adult support. Each activity is responsive and provides students the feedback they need to progress through the activity and continue to develop understanding, fluency, and overall number sense.

Does the technology facilitate a teacher's ability to differentiate lessons, tasks, or other content for students?		X				Teachers are able to individually assign students to any topic in Zearn's K–5 math curriculum. Each Zearn Math G1-5 Independent Digital Lesson includes built-in, deep support on concepts from previous topics and grades to support students to access grade-level lessons. Embedded supports in the K Digital Activities precisely address misconceptions in real time to supports students with accessing these digital fluency exercises. Class Reports and Student Reports in G1-5 provide teachers with real-time data on student pace, progress and productivity, so they are empowered with the full information they need to choose deeper interventions when necessary and assign students to foundational lesson content. The Kindergarten Activity Tracker provides teachers with real-time data on student progress through the sequence of Digital Activities, so they are empowered to uses guiding questions provided in Mission Overviews to support students' mathematical development in each type of fluency activity as needed.
Are there tutorials, videos, or other integrated supports in the materials to help educators to understand and/or utilize the materials?		X				Zearn maintains a robust Help Center, School Resource page, and YouTube channel to provide video tutorials and other resources to support teachers with using Zearn Math. Links to each of these support centers, as well as specific resources, are integrated with the program so that teachers can readily access from within their Zearn Math account.

Are there tutorials, videos, or other integrated supports in the materials to help parents/guardians to understand and/or utilize the materials?	X				Zearn Math offers: (1) Parent/caregiver packs to send home to quickly orient to Zearn Math (in English and Spanish) and (2) video tutorials and recorded webinars for parents to walk through quick-start instructions and orient to the components of a digital lesson.
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				Zearn Math Individual Accounts are available for free to all administrators, teachers, parents/guardians, and students. Students only have access to instructional content. Teachers and parents have access to additional features, data, and reports. Administrators with access to a School Account can view school- and district- wide reports on progress, pace, and productivity.
Are the materials designed to integrate with a Learning Management System (LMS)?			X		
Does all content conform to the National Instructional Materials Accessibility Standard?	X				All Zearn Math Student Workbooks are fully compliant with NIMAS requirements. The NIMAC recently started accepting file sets for digital instructional materials, and Zearn is in the process of submitting digital materials to confirm their compliance with NIMAS requirements as well.
Is there technical support during day-to-day use?	X				Zearn provides free customer support, including technical troubleshooting/support, to all customers.

Section 2: Technology Checklist

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

Design

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

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Questions	Check Only One				Details
	Yes with core product	**Yes** with dependencies	**No**	Under Development	
Are the materials designed to be used with both digital and print components? Are there print options available for student-facing materials that could be utilized in a blended digital approach? Is the print content identical, similar, or comparable to the digital?	X				___X___ Purchase hard-copy books/workbooks ___X___ Photo copies available for purchase ___X___ Users can print at home Instructional materials include both digital and print components. Print components are similar, but not identical, to the digital lessons; the two modalities complement one another and provide multiple pathways into grade-level math content. While print and digital materials are designed to be used together, either can be used as standalone instruction (for example, digital lessons during remote learning).

Is the digital design of the materials intended to replicate a textbook experience?			X		
Are digital teacher guides available for the materials?	X				Teachers have access to free digital guides for every unit of K–5 math. These resources provide an overview of key learning objectives as well as detailed descriptions of every lesson in the unit.
Do the materials contain videos/animations/simulations for student learning?	X				Zearn Math digital lessons include: • **(G1-5)** Video-based concept development led by on-screen teachers using interactive activities with digital math models • **(K)** Personalized, interactive digital learning experience with embedded remediation and supportive scaffolding based on student struggle These videos and animations are native to the Zearn Math materials and cannot be accessed by links leading to other sources.
Is any or all online content dependent on links that are not maintained by the publisher?			X		
Do the materials include opportunities for online collaboration among students?			X		
Do the materials include built in features for student-to-teacher interaction?			X		
Is a 1:1 device ratio required?			X		A 1:2 device to student ratio is the minimum requirement
Are the assessments contained within the materials able to be securely completed by students online?	X				Zearn Math includes a series of ongoing, formative assessments designed to provide teachers with precise and actionable feedback. For Grades 1-5, the daily digital assessment is a lesson-level,

					scaffolded assessment that allows students to demonstrate their new understanding. The digital assessments are administered automatically at the end of each G1-5 digital lesson and can be securely completed by students online. Zearn also offers Mid- and End-of-Mission assessments for K-5 that are paper assessments consisting of open response items that require students to show their work or explain their thinking in a variety of ways.
Is data available about user sessions (e.g., timestamps, content being viewed, callbacks fired, etc...)?	X					Teachers and Admin have access to data showing: student recent login date and frequency; time spent on Zearn; number of lessons completed; progress through the curriculum; and other such similar data. The only users who have access to this data are teachers and administrators affiliated with the students' Zearn Math account.
Are there online professional learning supports to help teachers utilize the materials?	X					Zearn Math offers ongoing PD for teachers for every unit of K–5 math (delivered through its on-demand PL platform). Within each PD session, teachers collaboratively explore unit-specific ideas, visual representations, and teaching strategies that deepen student learning. Zearn Math also provides an implementation PD series to support teachers with establishing systems that support student learning.
Are there parent/guardian resources available for school systems to utilize: • For when there is in-person instruction? • For when there is hybrid instruction?	X					Zearn provides free access to a wide range of parent/guardian support resources: parent letters/presentations for school orientations; remote learning videos, articles, and guides (in English and Spanish); and more.

● For creating continued learning plans for distance learning schedules?								

Learning Management Systems	Blackboard	Canvas	Eduphoria	Google Classroom	ItsLearning	Moodle	Schoology	Other: Please list below
Are the materials configured to work with one or more learning management systems? Check all that apply.	X	X	X	X	X	X	X	
The current version of Zearn can be embedded directly within any of the above LMS's.								

System Access

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

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Questions	Check Only One				Details
	Yes with core product	**Yes** with dependencies	**No**	Under Development	
Is single sign-on supported?	X				Zearn supports single sign-on (SSO) through Clever and Google. Clever integration is a feature only available only for paid accounts.
Can the platform manage staff assigned to multiple schools with a single sign-on?	X				
Can co-teachers be assigned to multiple classes?	X				Classroom sharing is a feature of a paid account.
Can students who move between teachers or schools using the same materials be re-assigned without losing their work/progress?	X				
Can the platform provide user accounts for staff members (principals and other admin) who are not assigned students?	X				Zearn provides Admin accounts to Principals and other administrators as part of a paid School Account.

	Yes with core product	Yes with dependencies	No	Under Development	Details
Can passwords be reset without assistance from trained IT staff?	X				Resetting the password for a teacher or administrator account cannot be disabled. Students are not able to reset their own passwords, these are managed by teachers or administrators.
When working offline, does the product automatically sync when a connection is re-established?			X		A stable internet connection is required to use Zearn. ~1Mbps per student.

Technical Support

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

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Technical Support	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Is technical support provided to districts during initial set-up and deployment?	X				Zearn's Support team provides rostering services and other technical support during initial set-up and deployment.
Is technical support provided during the duration of the contract?	X				Zearn's Support team replies within 24-48 hours (business days) to all emails, including those with requests for technical support. Support is offered year-round; there is no expiration.

	Yes with core product	Yes with dependencies	No	Under Development	Details
If utilizing a free or trial version, is technical support provided?	X				
Are there self-service supports for troubleshooting?	X				Zearn's Help Center contains robust FAQs addressing common troubleshooting questions.
Does technical support include planning for emergency access and district support?	X				Zearn provides multiple emergency access points in the case that a school or districts desired SSO solution fails.

Compatibility

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

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

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

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	Yes	Windows XP	Windows 10	
Linux	No			
Windows Tablet	Yes		Windows 10	
Apple Laptop/Desktop	Yes	macOS 10.13	macOS 10.15	
iPhone	Yes			
iPad	Yes	iOS 9.5	iOS 13.5	Not iOS 11
Android Phone	Yes			
Android Tablet	Yes			
Chromebook/Chrome OS	Yes		81.0.4044.141	
Amazon Fire OS	Partial	5.3.6	6.3.0	
Other E-Reader	No			

Interactive Whiteboard	No			

Browser		Operating System						
		Apple		Windows				
	Check if browser is compatible	Oldest version supported	Newest version supported	Oldest version supported	Newest version supported	Linux	Chrome OS	N/A
Chrome	Yes	80.0.3987	83.0.4103	80.0.3987	83.0.4103		83.0.4103	
Firefox	Yes	75	77.0.1	75	77.0.1			
Safari	Yes	13.1.1	13.1.1	N/A	N/A			
Edge (formerly Internet Explorer)	Yes	N/A	N/A	44.18362.449.0	83.0.478.45			
Internet Explorer	No							
Other:____								
Additional Notes:								

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Accessibility

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

Questions	Check Only One				Details
	Yes with core product	Yes with dependencies	No	Under Development	
Screen Readers			X		Due to the visual nature of Zearn Math's digital manipulatives, these manipulative interactions are not screen reader accessible. However, Zearn provides text-to-speech features for all instructional prompts so that students may have instructions read aloud.
Screen Magnification Software	X				
Text Readers	X				All instructional prompts on Zearn have a built-in audio button to allow students to have the prompt read aloud, either through recorded audio or a text-to-speech feature. Text on Zearn is also compatible with browser text-to-speech tools or external text readers.
Adjustable Print Size			X		
Speech Input Software		X			Zearn uses standard HTML inputs, and therefore students can use speech software to write their numerical answers in inputs. However, other manipulatives and buttons on Zearn cannot be controlled with speech software.

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Header Point Devices			X		
Motion/Eye Tracking Devices			X		
Single Switch Entry Devices				X	Zearn is currently working on becoming fully keyboard accessible and will support alternative input devices once we have completed this project.
Braille Readers/ Display Devices		X			Digital lessons are not compatible with Braille readers. However, schools can request Braille or other accessible formats from the NIMAC for Student Notes and Exit Tickets. Student Notes and Exit Tickets are also online as accessible PDFs now.
Closed Captioning	X				
Alternative Input Devices				X	Zearn is currently working on becoming fully keyboard accessible and will support alternative input devices once we have completed this project.
High Color Contrast Display Options		X			Zearn does not have built-in settings for high color contrast options, but is compatible with browser plug-ins for accessibility, including high color contrast display options.
Translation of Text to Other Languages			X		
Bilingual Dictionaries available for students			X		
Are there required accessories (headsets, speakers)?	X				Zearn digital lessons require the use of a headset so students can listen to the on screen teacher while learning independently. However, because closed captioning is available in all digital lessons,

					students may watch lessons without sound or related accessories.
Multiple Playback of audio/video	X				
Can students adjust the speed of audio/video playback?			X		
Are these accessibility supports able to be turned on/off?	X				Closed captioning can be toggled on/off.
Does all browser-based technology satisfy the Web Content Accessibility Guidelines or VPAT?				X	Zearn is working to conform with accessibility standards, including the Web Content Accessibility Guidelines (WCAG 2.0). Zearn views its commitment to accessibility as ongoing and will continue to make updates to ensure curricular materials are usable for all students, including those with disabilities. While Zearn does not currently have a VPAT, we have worked with Perkins Access to identify accessibility errors and are continuously working to address them.

Additional Technology Specifications

Data Security and Privacy

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

Questions	Check Only One			Details
	Yes	No	Under Development	
Data Security: Are data elements encrypted at rest, i.e. in a database or file system?	X			All data is encrypted, both in transit and in rest, using AES 128-bit key encryption, or better.
Data Security: 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		
Privacy: Is personally-identifying student data provided to, generated by, or stored in any systems used by the product?	X			Educators are required to provide students' first name, last name, student ID number, grade level, teacher name, classroom name, date of birth (to the extent the school is syncing with Clever). There are no optional data elements. The program creates site usage information.
Privacy: Does the product/vendor make their student privacy policy publicly available?	X			Yes. See here: https://about.zearn.org/privacy
Privacy: Does the product conform with FERPA regulations (e.g., allows districts to maintain direct control of the student	X			

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record, implements permissions to prevent unnecessary disclosures, etc.)?				
Privacy: Has a third-party evaluated the product for FERPA compliance?		X		
Privacy: Does the product allow registration or data collection from children under the age of 13?		X		In compliance with the Children's Online Privacy Protection Act (COPPA), we do not knowingly request or collect personally identifiable information from users under 13 years of age.

Installation

Feature/Requirement/Specification	Check Only One			Details
	Yes	**No**	**Under Development**	
Is the product downloaded to individual devices: one-time internet connection required?		X		
Is the product installed on individual computers (from CD-ROM/DVD, flash drive, etc.): no internet connection required?		X		
Is the product installed on LAN/WAN (school or district server): no internet connection required for teachers/students after installation?		X		
Required server configuration. Do network admins need to ensure a specific set of domains are white listed to allow the internet traffic to those endpoints?	X			Whitelist all domains shown in this Help Center article: https://help.zearn.org/hc/en-us/articles/115001431507
Does the product support deployment through Mobile Device Management (MDM) systems?		X		
Does the product provide a detailed schedule of updates that minimizes access interruption?	X			
Does the login authentication use district protocols to establish unique and memorable usernames and passwords?	X			Through Paid School Accounts, Zearn provides rostering services in line with district protocols.
Is there an option for concurrent user licensing?		X		

Standards Compliance/Certification	Check all that apply	Details
SIF		
CEDS		
EDUPUB		
Ed-Fi (SIS/ODS)		
Ed-Fi (Assessments)		
MS Global (Competencies and Academic Standards Exchange)		
IMS Global (Comprehensive Learner Record)		
IMS Global (Open Badges)		
IMS Global (One Roster)	X	Zearn is compatible with OneRoster CSV. Zearn is not compatible with OneRoster API. Zearn has not paid for official certification.
IMS Global (Caliper Analytics)		
IMS Global (Question and Test Interoperability (QTI))		
IMS Global (Learning Tools Interoperability (LTI))		
IMS Global (LTI Advantage)		
IMS Global (Common Cartridge)		
IMS Global (Lite Common Cartridge)		
IMS Global (Open Video)		
Other: Clever	X	

Implementation and Scalability	Yes/No or Value
What is the average page load time?	3.04 seconds
What is the required bandwidth per user?	~1 Mbps
Are results of stress tests provided to customers?	No
Is a disaster recovery plan for data provided to customers?	Yes. Zearn provides an incident response plan that is available to customers upon request.
Are customers provided with a standardized implementation plan to ensure a successful rollout?	Yes
Does the service level agreement include uptime guarantees of at least 95% excluding planned maintenance/down-times?	No
Does the product require a VPN for off site access?	No