



Instructional Materials Technology Information

Title: Middle School Math Solutions

Content Area: Math

Publisher: Carnegie Learning

Grades: 6-8

Copyright: 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 | | | | Yes. Carnegie Learning designed each course to include a consumable student text and adaptive MATHia software. Students can access MATHia software from any computer or tablet with internet access. Students can access and interact with the student text as an eBook or view the same content as a digital eText. |
| Do the materials support learning in hybrid settings (both in-person and remote learning) concurrently? | X | | | | <p>Carnegie Learning's instructional resources support whole-class instruction in both in-person and remote learning situations.</p> <ul style="list-style-type: none"> • Student materials are available in multiple formats: a consumable printed textbook, eText, and eBook. • Presentation slides allow teachers to facilitate instruction in hybrid settings. • A library of lesson videos is available for students to review key concepts at home. <p>MATHia, specially designed for students to learn independently, simulates 1-to-1 coaching that adapts to give students exactly what they need at any given moment. They have the support of Sample Problems and Step-by-Step Examples for each workspace. Multi-level hints, including just-in-time hints, are</p> |

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| | | | | available throughout the software to support students as they solve problems. Their experience with MATHia is the same in both a brick-and-mortar setting or learning at home. The LiveLab facilitation tool allows teachers to monitor student activity in either learning environment. |
| Are tasks, activities, and lessons able to be printed either for in-class use or for use in at-home learning? | X | | | Yes. The Carnegie Learning model already utilizes a consumable student text. Students have online access to the eText materials to print as needed at home. |
| Is there instruction so students can work independently (or with an adult at home)? | X | | | <p>Yes. Designed for students to learn independently, students can use MATHia anytime and anywhere. Instructional supports include:</p> <p>Lesson Overview Videos Carnegie Learning Master Math Practitioners have created a range of instructional videos for each lesson to support students and parents at home.</p> <p>LiveHint LiveHint provides online support for students and parents/guardians by enabling searchable hints and support for students working in their consumable Student Edition or eBook</p> <p>Home Connections Support Portal Home Connections provide parents/guardians with product support and education and resources such as Family Guides.</p> <p>Family Guides Available within the student textbook and digitally, Family Guides introduce parents to the mathematics of the topic, describe how the math fits into the scope of the course, and provides specific questions parents can ask students to support learning at home.</p> <p>MATHia Student Reports Student reports track student activity and progress towards standards whether the student is learning at school or at home.</p> |

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| <p>Does the technology facilitate a teacher's ability to differentiate lessons, tasks, or other content for students?</p> | <p>X</p> | | | <p>The artificial intelligence in MATHia software automatically differentiates content for students, guaranteeing that they receive the just-right amount of practice and instruction that they need for each concept.</p> <p>LiveLab provides in-the-moment guidance indicating to teachers which students to follow-up with and provides suggestions on the skills that require additional support. A suite of MATHia Reports informs teachers about student progress on the standards.</p> <p>MATHia, LiveLab, and the reports provide data to the teachers to empower them to make instructional decisions for their students and class. In addition to interpreting student performance, the APSLE (Adaptive Personalized Learning Score) report predicts year-end summative assessment results.</p> <p>Teachers can also build custom modules in MATHia that they can assign to individual students, groups of students, or the entire class.</p> |
| <p>Are there tutorials, videos, or other integrated supports in the materials to help educators to understand and/or utilize the materials?</p> | <p>X</p> | | | <p>In addition to printed resources, teachers have access to an entire ecosystem of ongoing classroom support, including MyPL, MyCL, and our LONG + LIVE + MATH community.</p> <ul style="list-style-type: none"> ● MyCL: MyCL is the central hub that provides teachers with access to all resources for use in the classroom and beyond, including the Teacher's Toolkit for creating and managing classes and students. ● MyPL: MyPL is a mobile and Web-based app that is like having the CL team right there with teachers, accessible anytime, anywhere. MyPL delivers a library of videos to help both prepare for the day and get help during the day. ● Lesson Overview Videos |

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| | | | | | Carnegie Learning Master Math Practitioners have created a library of instructional videos for each lesson to support teachers. |
| Are there tutorials, videos, or other integrated supports in the materials to help parents/guardians to understand and/or utilize the materials? | | | | | <p>Home Connections Support Portal Home Connections provide parents/guardians with product support and education.</p> <ul style="list-style-type: none"> <p>Family Guides Each topic in the Carnegie Learning Math Solution contains a Family Guide, available in English and Spanish. Available within the student textbook and digitally, each Family Guide introduces parents to the mathematics of the topic, describes how the math fits into the scope of the course, and provides specific questions parents can ask students to support learning at home.</p> <p>Lesson Overview Videos Carnegie Learning Master Math Practitioners have created a range of instructional videos for each lesson to support students and parents at home.</p> <p>MATHia Student Reports Parents/guardians can view student reports to track student activity and progress towards standards whether the student is learning at school or at home.</p> <p>LiveHint LiveHint provides online support for students and parents/guardians by enabling searchable hints and support for students working in their consumable Student Edition or eBook.</p> |
| <p>Are all of the following audiences provided access to the product as part of the core purchase?</p> <ul style="list-style-type: none"> parents/guardians Educators (Teachers, Administrators, etc.) | | | | | <p>Parents/guardians: Parents/guardians can view student progress in MATHia software via their student's login to view assignments and progress in MATHia software. We provide additional support for parents/guardians as listed above. All parent/guardian materials are part of the core purchase.</p> <p>Usage data for parents/guardians is not tracked by our systems.</p> |

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| <ul style="list-style-type: none"> Students | | | | <p>Educators (Teachers, Administrators, etc.): Teachers and administrators have access to:</p> <ul style="list-style-type: none"> The student view of MATHia Digital eTexts of the Teacher's Implementation Guide and Student Edition Edulastic assessments and item bank Student eBooks (if purchased) MyCL MATHia reports (including student activity reports) LiveLab Teacher activity is tracked and available as part of our reporting suite. Teachers and administrators can view this report. <p>Students: Students have access to:</p> <ul style="list-style-type: none"> Digital eBooks and/or printed consumable Student Editions, depending on purchase MATHia software Digital eText LiveHint Lesson Overview videos |
| <p>Are the materials designed to integrate with a Learning Management System (LMS)?</p> | X | | | <p>Yes, full materials are available outside an LMS, via direct login to our products. Materials can be integrated into an LMS, either via SSO link to our products or Thin Common Cartridge to import eText lessons into an LMS, where such imported materials are static.</p> |
| <p>Does all content conform to the National Instructional Materials Accessibility Standard?</p> | X | | | |
| <p>Is there technical support during day-to-day use?</p> | X | | | <p>Carnegie Learning's Customer Support Team is available Monday - Friday from 8:00 a.m. to 9:00 p.m. ET. This expert team provides support for installations, networking, and other technical issues in addition to consulting on general questions related to pedagogy, classroom management, content and curricula via email, live</p> |

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| | | | | | chat, or over the phone. Users can call directly using our toll free number to speak directly with a team member. Our experienced team members can guide a teacher or administrator and address any challenges. We guarantee a response from the CL team within 1 business day. |
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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.

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 core materials as reviewed by EdReports that are available without LMS integration.

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

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| | | | | <p>Yes. Each Carnegie Learning core product includes a student edition and access to MATHia software, an integrated digital component.</p> <p>Carnegie Learning offers identical content of the student edition in three ways: as a printed consumable book, as a digital eText, and as an interactive eBook.</p> <p>Students have online access to the eText materials to print as needed at home.</p> |
| Is the digital design of the materials intended to replicate a textbook experience? | X | | | <p>Yes. The Carnegie Learning core products include a consumable text and MATHia software. We believe that students need to engage with content to benefit from it. Our digital eText and the interactive eBook replicate the printed textbook experience.</p> |
| Are digital teacher guides available for the materials? | | | | <p>Yes. The Teacher's Implementation Guide (TIG) is available as a digital eText.</p> <p>Teachers can also access lesson support via MyPL—an interactive library of video content designed by Carnegie Learning Master Practitioners to assist teachers in implementing the instructional resources.</p> <p>Additionally, we provide presentation slides in PowerPoint and Google Slides to assist teachers in facilitation textbook lessons.</p> |
| Do the materials contain videos/animations/simulations for student learning? | X | | | <p>Yes. MATHia gives users a variety of tools and customization features that enable a unique learning experience.</p> <p>Animations allow students to watch, pause, and re-watch demonstrations of various mathematical</p> |

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| | | | | | <p>concepts. Through visual depictions and audio narration, they connect the representations of different mathematical ideas to their abstract underpinnings.</p> <p>Explore Tools support the investigation of mathematical concepts, search for patterns, and look for structure in ways that make sense to students.</p> <p>Classification Tools apply students' mathematical understanding by categorizing answers based on similarities and allow students to demonstrate proficiency in recognizing patterns in problem structure.</p> <p>Problem Solving Tools provide highly individualized and self-paced instruction that adapts to each student's exact needs to deepen their conceptual understanding of mathematics.</p> <p>Each MATHia workspace includes the appropriate tools to learn and practice the targeted mathematical concepts.</p> |
| 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 | | Our digital materials do not explicitly provide for these experiences. Teachers may facilitate online collaboration using their LMS, but our digital materials do not allow for student-to-student interaction. |
| Do the materials include built in features for student-to-teacher interaction? | | | X | | |

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| Is a 1:1 device ratio required? | | | X | <p>The Carnegie Learning Math Solutions do not require a 1:1 device ratio. Students can access MATHia software from any supported device with internet access. For students with limited access to technology, there are consumable Skills Practice workbooks that provide targeted practice of each course's skills and mathematical concepts.</p> |
| Are the assessments contained within the materials able to be securely completed by students online? | X | | | <p>Yes. Carnegie Learning's partnership with Edulastic (www.edulastic.com), an online assessment platform, gives educators powerful tools for assessing learning and measuring student progress. Through Edulastic, educators can build, edit, and assign pre-built and customizable assessments for students to access and complete online.</p> <p>In MATHia, assessment is a fully integrated part of the learning process. MATHia continuously assesses every step of each student's work, analyzes that work, and delivers a custom learning path for each student, focused on developing a deep level of understanding in order to help them achieve skill mastery. As students work through problems, each step is associated with one or more required cognitive skills.</p> <p>The behind-the-scenes algorithm that MATHia uses to select problems acts as a rubric. The rubric takes into account a student's attempts, use of supporting hints, number of errors, and number of accurate responses in order to determine when a student has mastered a set of skills associated with a workspace.</p> |
| Is data available about user sessions (e.g., timestamps, content being viewed, callbacks fired, etc...)? | X | | | <p>LiveLab LiveLab provides in-the-moment, actionable data, such as when students are working or idle, so teachers can effectively manage student work in</p> |

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| | | | | | <p>MATHia at all times. LiveLab alerts teachers when students may be in need of additional support, and also indicates when they have reached progression milestones.</p> <p>Session Report The Session Report provides teachers with a detailed view of the work completed each time a student logged in to MATHia, including where the student worked in the software during each session.</p> <p>Progress Report Teachers can drill down by class to the Student Detail Report. The student view of the Student Detail Report monitors student progress and efforts in very specific content areas. The report identifies student progress across the entire syllabus, including:</p> <ul style="list-style-type: none"> • Syllabus, Module, Unit, and Workspace completion status • Total Time spent in each unit • Performance Scores for each completed workspace |
| Are there online professional learning supports to help teachers utilize the materials? | X | | | | <p>Teachers can access on-demand, online professional learning through MyPL. MyPL is an interactive library of video content designed to provide math educators with three things:</p> <ul style="list-style-type: none"> • Just-in-time support as they implement Carnegie Learning solutions • A plethora of tips on classroom strategies, easily accessible at the moment that they might need them • The overarching feeling that they always have real Carnegie Learning experts in their corner |

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| | | | | <p>All content is curated by our Master Math Practitioners, including experts from Professional Learning (MSPs), Instructional Design, Research, and even some of our master classroom teachers. The content is searchable by keyword or phrase, and is also (currently) sortable by 5 different categories that educators may browse:</p> <ul style="list-style-type: none"> ● CL MSMS Support ● CL MATHia Support ● Classroom Management ● Classroom Strategies ● Math Content <p>Additional Features include the ability to:</p> <ul style="list-style-type: none"> ● Add a video (save it) to your profile for easy access ● Add personal notes to videos ● Share videos on social media |
| <p>Are there parent/guardian resources available for school systems to utilize:</p> <ul style="list-style-type: none"> ● For when there is in-person instruction? ● For when there is hybrid instruction? ● For creating continued learning plans for distance learning schedules? | X | | | <p>Yes.</p> <p>Home Connections Support Portal Home Connections provide parents/guardians with product support and education (Help articles, etc) and resources such as Family Guides.</p> <p>Family Guides Each topic in the Carnegie Learning Math Solution contains a Family Guide. Available within the student textbook and digitally, each Family Guide introduces parents to the mathematics of the topic, describes how the math fits into the scope of the course, and provides specific questions parents can ask students to support learning at home.</p> <p>Lesson Overview Videos</p> |

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| | | | | | | <p>Carnegie Learning Master Math Practitioners have created a range of instructional videos for each lesson to support students and parents at home.</p> <p>MATHia Student Reports Parents/guardians can view student reports to track of student activity and progress towards standards whether the student is learning at school or at home.</p> <p>LiveHint LiveHint provides online support for students and parents/guardians by enabling searchable hints and support for students working in their consumable Student Edition or eBook.</p> |
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| Learning Management Systems | Blackboard | Canvas | Eduphoria | Google Classroom | ItsLearning | Moodle | Schoology | Other: Please list below |
|---|-------------------|---------------|------------------|-------------------------|--------------------|---------------|------------------|-------------------------------------|
| Are the materials configured to work with one or more learning management systems? Check all that apply. | X | X | | X | X | | X | |
| <p>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.</p> <p>We work with the LMS platforms checked above via Clever and can connect with any LMS platforms that work with Clever. We also support custom integrations using IMS Global standards, OneRoster and LTI. There is no charge for this service.</p> | | | | | | | | |

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 | | | | We support Clever and Classlink as well as custom integration via LTI and OneRoster. |
| Can the platform manage staff assigned to multiple schools with a single sign-on? | X | | | | |
| Can co-teachers be assigned to multiple classes? | X | | | | Yes. This process is supported for customers doing roster integration and is managed by the district in their roster data. |
| Can students who move between teachers or schools using the same materials be re-assigned without losing their work/progress? | X | | | | Yes. The materials are assigned to the student and not the class, so any class to which the student is assigned will show the student's work. |
| Can the platform provide user accounts for staff members (principals and other admin) who are not assigned students? | X | | | | Yes. There are two levels of users (instructor and supervisor). Roles are assigned and managed by the district. Schools can also create instructor and supervisor accounts manually through our |

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| | | | | | web-based invitation process. This is part of the standard software purchase. |
| Can passwords be reset without assistance from trained IT staff? | X | | | | Yes. This is part of teacher functionality within the software. |
| When working offline, does the product automatically sync when a connection is re-established? | | | X | | MATHia requires an internet connection. While MATHia can handle a temporary loss of connection and still allow the student to continue working on a problem, they will need to have a connection to proceed to the next problem. |

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 | | | | Yes. Our implementation team will work directly with District technical staff to ensure a successful implementation, including roster/LMS/SSO integration. This support is provided throughout the life of the contract. |

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| Is technical support provided during the duration of the contract? | X | | | | Carnegie Learning's Customer Support Team is available Monday - Friday from 8:00 a.m. to 9:00 p.m. ET. This expert team provides support for installations, networking, and other technical issues in addition to consulting on general questions related to pedagogy, classroom management, content and curricula via email, live chat, or over the phone. Users can call directly using our toll free number at 1-877-401-2527, to speak directly with a team member. Our experienced team members can guide a teacher or administrator and address any challenges. We guarantee a response from the CL team within 1 business day. |
| If utilizing a free or trial version, is technical support provided? | X | | | | Technical support is provided for free for all users. |
| Are there self-service supports for troubleshooting? | X | | | | We provide a comprehensive Help Center and the System Help tool gives users information on getting started and working with the software tools. |
| Does technical support include planning for emergency access and district support? | X | | | | Yes. |

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 | | Smartphones are not supported due to the limited screen size which would interfere with the pedagogical and cognitive design of the content. |
| 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 | X | | | | If yes, |

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| (e.g. computer at school and a laptop at home or a smartphone and a laptop)? | | | | | <ul style="list-style-type: none"> Are additional software downloads or licenses necessary? No. |
|--|--|--|--|--|--|

| Device Type | Mark box if device is compatible | Oldest operating system/version supported | Newest operating system/version supported | Details |
|------------------------|----------------------------------|---|---|--|
| Windows | Y | Windows 10 | Windows 10 | Generally compatible. |
| Linux | N | | | |
| Windows Tablet | Y | Android 9 | Pie | Generally compatible. |
| Apple Laptop/Desktop | Y | Mac OSX 10.14 | Latest version | Generally compatible. |
| iPhone | N | N/A | N/A | |
| iPad | Y | iOS 12 | Latest version | |
| Android Phone | N | N/A | N/A | |
| Android Tablet | Y | Android 9 | Latest version | Generally compatible. |
| Chromebook/Chrome OS | Y | ChromeOS 74 | Latest version | Generally compatible. |
| Amazon Fire OS | N | N/A | N/A | |
| Other E-Reader | N | N/A | N/A | |
| Interactive Whiteboard | Y | * | * | *The interactive whiteboard must run on one of our supported browsers. |

| Browser | | Operating System | | | | | | |
|-----------------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------|-----------|-----|
| | | Apple | | Windows | | Linux | Chrome OS | N/A |
| | Check if browser is compatible | Oldest version supported | Newest version supported | Oldest version supported | Newest version supported | | | |
| Chrome | Y | Chrome 74 | Latest version | Chrome 74 | Latest version | N/A | Chrome 74 | |
| Firefox | Y | N/A | N/A | Firefox 67 | Latest version | N/A | N/A | |
| Safari | Y | Safari 11 | Latest version | N/A | N/A | N/A | N/A | |
| Edge (formerly Internet Explorer) | Y | N/A | N/A | Edge 44.17763 | Latest version | N/A | N/A | |
| Internet Explorer | N | | | | | | | |
| 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.

| Questions | Check Only One | | | | Details |
|--|-----------------------------|-----------------------------|----|----------------------|--|
| | Yes with core product | Yes with dependencies | No | Under Development | |
| Screen Readers | X | | | | |
| Screen Magnification Software | X | | | | |
| Text Readers | X | | | | |
| Adjustable Print Size | X | | | | |
| Speech Input Software | X | | | | |
| Header Point Devices | | | X | | |
| Motion/Eye Tracking Devices | | | X | | |
| Single Switch Entry Devices | | | X | | |
| Braille Readers/ Display Devices | X | | | | |
| Closed Captioning | X | | | | |
| Alternative Input Devices | X | | | | |
| High Color Contrast Display Options | X | | | | |
| Translation of Text to Other Languages | X | | | | MATHia software is available in English and Spanish. Other language translations are available via Google Translate. |

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| Bilingual Dictionaries available for students | X | | | | The MATHia glossary is in both English and Spanish. |
| Are there required accessories (headsets, speakers)? | | | X | | |
| 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 | | | | Text to speech can be turned on and off by the student. NIMAC and similar support needs to be implemented with the school district. Video playback is all based on an action taken by the student. Translations need to be specifically assigned to the school to ensure they can access. |
| Does all browser-based technology satisfy the Web Content Accessibility Guidelines or VPAT ? | X | | | | Completed VPAT available from publisher upon request. |

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 in transit and at rest. All network data transfers are carried out over TLS, without exception. Presently we support TLS 1,1.1,and 1.2. We use AES256 and SHA-512 to secure data at rest in the database. |
| Data Security: Do the materials refer students to video, content, and other online sources that are not native to the materials? | | X | | Yes, MATHia software is a closed system. |
| Data Security: Does the end-user licensing agreement allow customers to scrape data from the product? | | X | | Scraping data is not permitted as per our Terms of Use . |
| Privacy: Is personally-identifying student data provided to, generated by, or stored in any systems used by the product? | X | | | The only personally identifiable or sensitive information that Carnegie Learning collects are names, email address (optional for students), school association and passwords. Carnegie Learning does not collect or maintain any demographic, academic or other school record information about students, teachers or administrators unless it has a separate reporting or research agreement. Carnegie Learning has designed its systems to ensure that sensitive student academic data is not tied, or linked, to a student on an identifiable basis. Other personal information collected and stored in a de-identified/blinded manner, separate |

| | | | |
|---|---|--|---|
| | | | <p>from the personally identifiable and sensitive information about students and teachers, may include:</p> <ol style="list-style-type: none"> 1. The class student is enrolled in; 2. Usage data on student activity within the digital properties, including answers provided, errors, hint requests, timing information, progress within the system, and inferences made from this data about student knowledge. |
| Privacy: Does the product/vendor make their student privacy policy publicly available? | X | | https://www.carnegielearning.com/privacy-policy/#:~:text=Carnegie%20Learning%20collects%20personal%20information,context%20authorized%20by%20the%20school. |
| 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.)? | X | | |
| Privacy: Has a third-party evaluated the product for FERPA compliance? | X | | <p>Future of Privacy Forum:</p> <p>https://studentprivacypledge.org/signatories/</p> |
| Privacy: Does the product allow registration or data collection from children under the age of 13? | X | | <p>See our privacy policy at this link, particularly Section 11 on student privacy. We are fully compliant with COPPA and applicable state laws:</p> <p>https://www.carnegielearning.com/privacy-policy/#:~:text=Carnegie%20Learning%20collects%20personal%20information,context%20authorized%20by%20the%20school.</p> |

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 | | Mathia software is a fully cloud-based solution. |
| 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 | | <p>For Capacity Planning: For up to 30 concurrent student users, allocate a minimum of 1Mbps Internet bandwidth total. Beyond 30 concurrent student users, allocate an additional 50kbps per user.</p> <p>Bandwidth-intensive activities such as streaming video, audio downloads, VoIP, and database backups can affect performance of Carnegie Learning software. Packet-shaping, QoS, and network traffic prioritizing techniques on heavily trafficked networks can improve performance.</p> |
| 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 | | | <p>Carnegie Learning wildcard hostnames are .carnegielearning.com, www.google-analytics.com and *.jslogger.com</p> <p>Alternatively, the following specific domains can be whitelisted:</p> <ul style="list-style-type: none"> ● cdn.carnegielearning.com ● ctp-svc.carnegielearning.com ● k12-svc.carnegielearning.com ● mypl.carnegielearning.com ● www.google-analytics.com ● apis.carnegielearning.com ● fonts.googleapis.com |

| | | | |
|---|---|---|--|
| | | | <ul style="list-style-type: none"> • *.useriq.com |
| Does the product support deployment through Mobile Device Management (MDM) systems? | | X | MDM is not applicable or necessary with this product. |
| Does the product provide a detailed schedule of updates that minimizes access interruption? | X | | Minor updates and bug fixes are deployed every two weeks during off hours and generally do not require down time. Major releases are deployed during periods of low usage such as over the summer and during the winter break period. Major releases may require some down time which is communicated to users in advance. |
| Does the login authentication use district protocols to establish unique and memorable usernames and passwords? | X | | <p>Yes. The district is responsible for establishing student usernames, either through roster integration or by manual creation. If the district is using single sign-on and students sign in through a school website, then the password criteria will be those established by the district.</p> <p>If the district is not using single sign-on then students are required to set their own passwords (must be at least 8 characters long, cannot be the same as the username).</p> |
| 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 | https://site.imsglobal.org/certifications/carnegie-learning-inc |
| IMS Global (Caliper Analytics) | | |
| IMS Global (Question and Test Interoperability (QTI)) | | |
| IMS Global (Learning Tools Interoperability (LTI)) | X | https://site.imsglobal.org/certifications/carnegie-learning-inc |
| IMS Global (LTI Advantage) | | |
| IMS Global (Common Cartridge) | X | https://site.imsglobal.org/certifications/carnegie-learning-inc |
| IMS Global (Lite Common Cartridge) | | |
| IMS Global (Open Video) | | |
| Other: | | |

| Implementation and Scalability | Yes/No or Value |
|--|---|
| What is the average page load time? | MATHia is a 'single page app'. Most user interactions have a median response time of about 0.5 seconds. Major navigations that change the user's context have a median response time of about 4 seconds. |
| What is the required bandwidth per user? | For up to 30 concurrent student users, allocate a minimum of 1Mbps Internet bandwidth total. Beyond 30 concurrent student users, allocate an additional 50kbps per user |
| Are results of stress tests provided to customers? | No. We are willing to discuss district requirements as necessary. |
| Is a disaster recovery plan for data provided to customers? | Yes. The MATHia database is continuously replicated to multiple locations, permitting us to restore data to any point in time within the previous two weeks. In addition, full backups of all data are made nightly and securely stored in AWS S3. Servers are ephemeral and do not have any configuration or state which needs to be backed up: they can be regenerated in minutes, from scratch, by our build and deploy systems. |
| Are customers provided with a standardized implementation plan to ensure a successful rollout? | Yes. Our experienced Implementation Team works closely with district and school staff to establish integration protocols for rostering and SSO. This is part of our onboarding protocol for every customer. |
| 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. |